REPORT RESUMES

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GUIDE FOR TRAINING SCHOOL LUNCH PERSONNEL.
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A COMMITTEE OF SCHOOL LUNCH SUPERVISORS AND DIRECTORS DEVELOPED THIS GUIDE TO ASSIST SCHOOL LUNCH LEADERS IN PLANNING EFFECTIVE LOCAL TRAINING PROGRAMS FOR FOOD SERVICE EMPLOYEES. THE CONTENTS INCLUDE--(1) PLANNING FOR INSERVICE TRAINING WHICH COVERS WORKERS AND PROGRAM NEEDS, SCHOOL POLICIES AFFECTING PROGRAMS, AVAILABLE RESOURCES, WAYS TO FINANCE THE PROGRAM, EVALUATION, SUGGESTED EVALUATION TECHNIQUES, AND TRAINEE SELF-EVALUATION QUESTIONS, (2) SUGGESTED TOPICS FOR TRAINING WHICH PROVIDES SUGGESTED LEARNING ACTIVITES, RESOURCE MATERIALS, AND IN SOME CASES, SUPPLEMENTAL ATTACHMENTS FOR UNDERSTANDING THE TOTAL PROGRAM, PLANNING NUTRITIOUS MENUS, IMPROVING MANAGEMENT PRACTICES, USING AND CARING FOR EQUIPMENT, AND PREPARING AND SERVING THE SCHOOL LUNCH, (3) EFFECTIVE USE OF A VARIETY OF METHODS AND RESOURCES IN TRAINING ADULTS WHICH INCLUDES GUIDELINES FOR TEACHING ADULTS, CHARACTERISTICS AND ATTITUDES OF ADULT LEARNERS, SOME WAYS IN WHICH ADULTS LEARN, SELECTING METHODS AND RESOURCE MATERIALS, CHARACTERISTICS OF APPROPRIATE METHODS AND RESOURCES, AND TEACHING METHODS. THIS DOCUMENT IS AVAILABLE FOR $1.25 FROM PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT, ROOM 169, EDUCATION BUILDING, ALBANY, NEW YORK 12224. (EM)

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guide for training school lunch personnel

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Guide For Training School Lunch Personnel

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Users of Material See above.

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Foreword

Properly nourished children are healthy children who are better able to learn. By providing a wide variety of well-balanced meals, the school lunch promotes the formation of desirable food and health habits.

In order to have a good school lunch program, every person concerned must understand its functions and the importance of nutrition, and have knowledge and high standards of food preparation and service. Workers will be helped to a greater degree when training is continuous. Some activities may be planned locally; others, on a sectional or Statewide basis. Successful training develops the kind of workers who will be able to do their part on teams that contribute to health and well-being of children.

This guide is designed to assist school lunch leaders in planning effective local training programs. Ideas and suggestions used are the outgrowth of experiences of many school lunch directors and managers who have contributed material. Their assistance is gratefully acknowledged.

Special appreciation is expressed to Mrs. Inez Butterfield; Mrs. Rosamond Crawford; Mrs. Alice Davey; Mrs. Mary Tarbell, who served on the initial planning committee; Mrs. Harriette Mark and Mrs. Frances Platt, who assisted the School Lunch Supervisory Staff in the writing of the final manuscript; and Dorothy S. Lawson for her interest and advice in editing the guide.

It is hoped that school lunch directors and managers will find the suggestions in the guide of help in training personnel. The material furnishes ideas which may be adapted and expanded to meet specific local needs.

CHARLES J. QUINN
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Introduction

The majority of school lunch workers have little or no background of training or experience for the work they are to do in large quantity food service. Employment in a school is a new experience for many. Many long-time school lunch employees have had few opportunities for training and have continued the practices used in their homes on the job. Personnel, with or without school lunch experience, must be trained both prior to coming on the job as well as while they work on the job. Well-organized training programs are needed in order to develop skills and acquire understandings of what may be accomplished through working in the school lunch program.

Workers derive personal satisfaction from learning more about the work they are doing and are interested in improving themselves on the job. Easier methods of performing daily tasks and greater appreciation of ways in which school services benefit children stimulate interest in wanting more training. Continuous programs are needed. Capable workers should be available when promotion opportunities arise.

Material in the guide has been prepared to help individuals responsible for school lunch training within school districts. It is primarily designed for group training, though procedures suggested are sufficiently flexible to be used for individual instruction as well.

Workshops may be planned for employees of a single school building, all buildings in a district, or several districts. The time selected may be days of scheduled teachers' meetings, school holidays, summer vacation days, or afternoons or evenings when school is in session.

The subject matter to be covered will depend upon specific needs. Sequence of activities may be changed and some sections eliminated completely if not appropriate. On the other hand, many topics may require expansion. Methods and techniques suggested for use are similar, regardless of the area under study.

The contents permits a rapid selection of materials. Some available resource materials have been listed in each unit. Other references may be obtained from the *Selected Bibliography for School Lunch Programs,* published by the N.Y. State Education Department, Albany, 1961.

Section I

Planning for In-Service Training

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Planning for In-Service Training

There are many ways in which the school lunch director or manager may plan to help workers improve and grow on the job. Continuous individual instruction during the working period is carried on each day. Additional learnings are gained when current professional periodicals and other publications are made available to the workers for home or on-the-job reading. Organized programs for group training reach a larger number of employees whose needs are similar. A combination of these training methods produces the most effective program of learning.

Plans for group in-service training need to be started far in advance. Making detailed arrangements and contacting persons who will be involved requires considerable time and organization. Preliminary to these details, the goals and values of the school lunch program should be reviewed and a survey made of needs of the program and personnel. Training is more readily accepted when needs are identified through cooperative planning. Although workers will not always be aware of overall requirements of the program, they profit by the opportunity to share in the planning process.

Training may be planned for the personnel in one or more buildings within a district or for any number of districts in an area. Plans will be influenced by the size of the group. Small class groups of 25-35 provide greater opportunity for learning and participation by the individual students though demonstrations and lectures may be used for groups of 100 or more. It is important to vary the types of teaching methods used.

Evaluation indicates the extent to which the training has been helpful and has reached the goals of group members and leaders. Continuous measuring of progress is necessary to guide the program. Plans should be made to conduct final evaluations which will measure growth and determine additional training needs.

POINTS TO CONSIDER

Plans for training are based primarily upon need. Policies of each participating unit should be considered. The time and location most suitable to all concerned and the available facilities and space are also important. Special abilities of leaders and consultants control the extent of training undertaken. When several leaders work together, one should be designated as general chairman or coordinator while the others may assume responsibility for particular phases of the training program. Costs and methods of financing should be planned in advance. The points to consider are described in more detail on the following pages.

Program Emphasis

Emphasis for a training program may be based on the needs of workers and needs that have been recognized for overall program improvement. Usually it is possible to plan a program that will contribute to both. Care must be taken, however, to be sure the expected outcomes are not more than can be reasonably achieved during the time available.

Some training programs may be successfully arranged for a large number of workers, even though their backgrounds of experience and abilities may vary. There are other times when it is desirable to plan a conference or series of meetings with smaller groups having similar backgrounds and needs. For example, certain workers, both with and without school lunch experience, may need training for specific skills. Arranging programs according to similarity of need permits the most effective use of time and facilities.

Needs of Workers and Program

Needs of the entire program and of individual workers may be identified in a variety of ways. Program goals should be used as a basis for determination. Group discussions or informal conversations with individuals concerning the weaknesses which they recognize and the difficulties encountered on the job may be the foundation for preliminary plans. Less obvious problems recognized by the director or manager should be included in the completed training schedule. The most urgent needs should be covered first.

School administrators, teachers, students, and others not closely involved with the program will recognize trouble spots which may escape the notice of those working with the lunch daily. They should be asked to point out problems noted which may be improved through training.

School lunch program records provide another means of pointing out weaknesses which may be corrected through in-service training. Cost control records will help to show whether or not labor and equipment are being used efficiently. Comparisons of the percentage of income used for food, labor, and other expenditures may indicate food preparation practices which need improvement. Food waste studies, bacteriological tests of foods and washed dishes, sanitation inspection reports, and evaluation check sheets for various phases of the program are among the other records which may point out needs.

Unusual community situations pinpoint special areas for training emphasis. Poor family food habits, cultural eating patterns, markets which stock limited varieties of fresh vegetables and fruits, and a large percentage of working mothers are examples. School lunch employees well versed in practical nutrition principles may influence many community members in the betterment of food patterns and family meals, as well as increase the number of well-balanced meals served at school.

Knowledge of changes to be made gives opportunities to prepare workers in advance for necessary adjustments. Policy changes, building programs, new equipment, added personnel, and increased emphasis on nutrition throughout the school program affect the school lunch department. In-service training programs prepare employees for different responsibilities and are a means of selecting and teaching new workers.

Much of the success of the training of school lunch personnel hinges on the skill of the leader in identifying needs and planning group instruction which stimulates interest and contributes to improved knowledge and performance. When the workers understand the purpose of the activity and the goals to be achieved, greater improvement will result.

School Policies Affecting Programs

Policies regarding in-service training of personnel vary in different school districts. Before undertaking any group in-service activities, the director or manager should check with the school administrator to be sure that such policies are clearly defined. Frequently this type of in-service training is new to the district and, therefore, help must be given to point out the values of a continuous plan.

Keeping in mind that policies are not always static, it is well to plan carefully with administrators to make possible some activities which may not have been permitted at an earlier time. It is never wise to run the risk of making plans that are contrary to school policy, even though such plans may be submitted to the administrator in advance of the conference. Time and energy are saved by knowing ahead of time what will be approved. Compulsory attendance, providing transportation, use of facilities and custodial services, and the like should meet with the approval of the administration.

Time and Place

Planning dates for group activities well in advance will assure better attendance and a satisfactory place for holding the meetings. Convenience of all concerned, especially the workers, is an important consideration. The type of program and size of the group influence the place chosen for workshops or conferences. It is anticipated that the person planning the program would be familiar with available facilities.

If meetings are planned for other than work hours, additional consideration should be given to family responsibilities of the workers and transportation available. Worker resistance to the entire program can be formed by a poor choice of time and place. Fatigue resulting from overlong sessions or meetings following a full day's work affects the value of the training.

Space for large groups may be more satisfactory in public meeting places if the necessary equipment is available. Resources of a college or university campus may be excellent and add professional dignity to the program.

Techniques To Be Used

A good training program covers the interests and problems of the group. While major emphasis is in the field of the greatest recognized need, plans should be made to use "attention getters" such as films, special speakers, and other means of motivating interest and putting the class members in a receptive mood.

Program topics which broaden the outlook of personnel and develop a better understanding of related school activities better qualify the workers for their jobs. Administrators and teachers of art, home economics, science, social studies, and other phases of the curriculum are pleased to be invited to take part.

A variety of topics and methods of presentation may be used in one session or a series of meetings. Care should be taken to avoid planning programs which are too long or which offer a greater abundance of new ideas than the workers can assimilate. Each person in the group should have an opportunity to participate. Question periods, planned skits or panels, demonstrations, buzz sessions, and other group participation methods may be used. Program breaks and group discussions provide for fellowship which is stimulating to student and leader alike.

Available Resources

The director or manager planning the program will enlist as staff members those available people who can give the most help on the topic under discussion. If she has had no opportunity for formal training, she may work with professionally trained persons in the area on the technical phases of the program. In many instances, directors or managers of several school districts will join forces to train their personnel. Each leader may take responsibility for certain phases of the program.

Help may be requested from school administrators and staff members, State agencies, local Extension personnel, college and commercial home economists, or other qualified persons. Guest talent is not necessarily a prerequisite for a successful meeting. School lunch workers with special abilities may be called upon to participate in demonstrations and practical exercises or to help with committee assignments. The guide lists many suggested classroom activities that may be used.

Ways To Finance The Program

Cost of the program must be kept at a minimum but should be sufficient to assure effective training. Fees may be charged or school funds used. If several school districts are participating, costs may be shared. Estimates of expenditures would be included in preliminary planning so that the amount to be spent is known in advance. Secretarial and custodial services, postage for mailing announcements, office supplies, visual aids, demonstration materials, and guest gratuities are among the items to be considered.

Plans should be made for meeting personal expenses such as transportation, lodging, and the like incurred by the participants if it is necessary for them to be away from home. Local policy controls whether these costs are paid by the individual or taken from school funds.

EVALUATING TRAINING PROGRAMS

A carefully prepared plan is needed for evaluation during and after the completion of in-service training programs. The value of any training may be measured in terms of the extent to which knowledge, attitudes, and skills have progressed. Many individual benefits which result from this experience may be identified. Self-evaluation helps to make individuals more aware of their own growth and frequently leads to recognition of additional needs.

Recognition of improvements in skills and abilities by all personnel involved, including the directors and managers, is an important outcome of the evaluation process. Subject matter suggested for future training programs and information about effectiveness of specific teaching methods may be used to advantage at a later date. Summarizing the part each worker plays in benefitting children and contributing to the lunch and school programs leads to better understanding of the lunch program in the community.

Suggested Evaluation Techniques

Questionnaires to be answered by trainees may be written or discussed informally. When in written form, replies usually are more candid, if the person answering remains anonymous. Questions asked may center around such topics as the extent to which needs were satisfied, confidence developed by individuals in their work performance, desire stimulated for further training, and specific parts of the planned program which gave them the most help. See suggested questions for self-evaluation found at the end of this section.

Workers may be brought together in groups to discuss reactions to the training. The stimulation of group thinking and exchange of ideas will probably bring about a more thoughtful analysis and a greater number of usable suggestions for further training.

Self-questioning of leaders as they review the program will disclose strengths and weaknesses of preplanning, physical arrangements, training methods, timing, and other phases. Observations of workers, during and after the training period, will indicate whether or not improvements took place in attitudes and skills on the job. The extent to which specific needs were met may also be noted by observation. Interest may be measured by the actual participation of the workers, the application which is made of new learnings, and the expressions of wishes for further training opportunities.

Opinions of other school staff members, students, and parents may be obtained to determine whether improvements were noted as a result of training. Complimentary remarks from those not directly connected with the lunch program increase the workers' interest and satisfaction in self-improvement and encourage added efforts.

Informal progress reviews should be continuous during training to guide the direction in which the program is going. More detailed and formal evaluation may be conducted at the end of each training unit. The retention of newly acquired attitudes and skill and the lasting value of training will be in effect throughout the working life of the employee if the program has been a good one.

Some Self-Evaluation Questions for Trainees

What new ideas gained from training have you used in your work?

In what ways have new practices learned made the job easier?

Which class session was most helpful to you? Least helpful?

Do you have a better understanding of the importance of your job to the health and well-being of children?

What did you expect to gain from the sessions? Was this expectation realized?

Which methods of presentation did you consider most worthwhile (films, demonstrations, lecture, discussion, panel, etc.)?

Were you given adequate opportunity to ask questions and discuss your ideas?

Has the training given you more confidence in performing your job?

Did the sessions enable you to get better acquainted with your supervisor and co-workers?

Was the time conveniently planned for you?

Are you interested in attending more training meetings?

Have you suggestions for specific topics and programs for future meetings?

Section II

Suggested Topics For Training

SECTION II

Suggested Topics For Training

One of the major decisions to be made in planning in-service training activities for school lunch personnel is the choice of topics. Of necessity, priority is given to those phases of the program in which the need for improvement is greatest. In most situations, the rapid expansion of school lunch programs and the steady increase in number of personnel creates a need for broad coverage of all phases of the operation. Crowding too much subject matter into a short period can make much of the training effort ineffective. To meet the great diversity of needs, it may be necessary to extend the training over several months or years. Some topics may be included more frequently and developed more fully than others as training sessions are being planned.

Five phases of school lunch operation which are found to represent common needs are developed in some detail in the following pages. These are concerned with:

Understanding the Total School Lunch Program

Planning Nutritious Menus

Improving Management Practices

Using and Caring for Equipment

Preparing and Serving the School Lunch

Suggested learnings, activities, and resource materials are listed for each topic. Supplemental attachments to aid the instructor are appended to some sections. Sufficient flexibility has been allowed in organizing the material to permit a choice of using the entire section or selecting the portions of it which may apply to specific needs. With care, suggested learnings and activities from one topic might be adapted to extend another section which does not fulfill needs completely or to introduce a topic not included in this guide.

Much will depend upon the amount of time, the available facilities, the express needs of the workers, and the capabilities of those who are taking leadership in the instruction. It should be kept in mind that the materials presented are only suggestions to adapt to particular situations.

Topic 1

UNDERSTANDING THE TOTAL SCHOOL LUNCH PROGRAM

An understanding of the objectives and organization of the School Lunch Program will make clear the place of every person engaged in the operation. This knowledge will improve the teamwork needed for the success of the program.

Consideration of the duties and responsibilities of the administering agencies at the Federal, State, and local levels will point up how a successful program is dependent on their cooperation.

The following pages show progress from individual, isolated efforts to provide children with some type of lunch at school to the present organization as prescribed under the National School Lunch Act.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Developing appreciation for progress in growth and development of school lunch program	Plan illustrated presentation on history and development of School Lunch Programs. *Early beginnings* France and England typical of early programs United States Children's Aid Society of New York—1893 Philadelphia first to organize municipal school feeding in elementary schools—1894 Other schools by 1910. *Federal assistance* 1932-33. Reconstruction Finance Corporation 1933-34. Civil Works Administration 1934-35. Federal Emergency Relief Administration (All provided funds to pay labor to prepare and serve school lunches.) 1935. Works Progress Administration Assigned school lunch to Division of Professional and Service Projects and permanent part of operation Provided funds for employment of school lunch workers Required a menu pattern which provided for food needs of children but did not state amounts 1935. Section 32 of Public Law 320 Provided a permanent annual appropriation to the U.S. Department of Agriculture for general purpose of expanding domestic markets for agricultural commodities 1944. Congress authorized the expenditure of a specific amount of Section 32 funds for the operation of the School Lunch Program. Provided that such activities could be carried out without regard to existence of a surplus situation 1946. The National School Lunch Act was passed as a measure of national security to: safeguard the health and well-being of the na-

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	tion's children; encourage the domestic consumption of nutritious agricultural commodities and other foods. 1962. National School Lunch Act revised Allotment of each fund to be based on pupil participation. An appropriation to provide special assistance for lunch programs in needy schools and to extend the program to American Samoa was authorized.
Understanding the role of the USDA in school lunch	Pass out copies of the National School Lunch Act to examine and discuss provisions Establishes school lunch as a grant-in-aid program of Federal assistance to the States Provides for appropriation of funds among the States by the Secretary of Agriculture based on formula stated in the Act Authorizes a portion of school lunch funds to be used to purchase and distribute foods for use in the program Directs that State education departments administer the program, according to an agreement approved by the US Department of Agriculture Provides for USDA administration of nonprofit private schools in States where administration by State education department is prohibited Act requires that: Lunches meet established nutritional standard; Free or reduced price lunches be served to children when needed as determined by local authorities without discrimination; Program must be nonprofit; and that Practical use be made of foods designated in plentiful supply, school lunch specials, and donated commodities. Records must be maintained and made available by schools for review and audit to determine whether regulations are being met. There will be no discrimination against minority groups in disbursement of funds. There will be no requirement with respect to teaching personnel, curriculum, instruction methods, and materials as a condition of participation. The success of the National School Lunch Program is dependent on the cooperation of the Federal, State, and local administering agencies. Present the role of the USDA in carrying out purpose, objectives, and program requirements.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Appropriation of funds for program Not less than 75 percent must be apportioned among States for cash assistance Not to exceed 3½ percent may be used by Secretary of Agriculture for administrative purposes Difference between above may be used by Secretary, under section 6, for direct purchase of agricultural commodities to be distributed among schools participating in the National School Lunch Program. Cash apportioned on basis of the following: Number of Type A lunches served Need for assistance based on relation of per capita income in United States to per capita income of State Where State agency cannot administer program in nonprofit private schools, percent of funds withheld to reimburse nonprofit private schools directly administered by Department Donation of commodities: Section 6—purchased with school lunch funds to aid schools in meeting nutritional needs of children Section 32—surplus agricultural commodities acquired under authority of section 32 Section 416—commodities available on a continuing basis under price support program Technical services available: Pamphlets, recipes, instructional information on preparation, storage, services. All information distributed by School Lunch Supervisory Unit, New York State Education Department. Operation performances: Requires reviews of operations at State and local levels to ascertain that purposes and goals are being met
Understanding the role of the State Education Department in school lunch	The State Education Department is responsible for administering the program in New York State, following a written agreement with each participating school district. Federal funds are provided to eligible schools as reimbursement for cost of obtaining agricultural commodities and other foods for use in the lunch program. Funds are provided on matching basis. Each Federal dollar must be matched by $3 from State sources. New York State funds are added and rates of reimbursement established for participating schools. Use and distribution—USDA donated commodities Section 6 foods are offered on basis of number of Type A lunches served.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Section 32 and section 416 foods are offered on basis of eligible participants, ability to use effectively, preservation and storage facilities.

Monthly information, on foods available in plentiful supply, is provided.

Assistance and supervision:

Administrative reviews are made.

Instructional and advisory services are provided.

Administrative reviews are on file showing follow-up action taken to effect needed improvements.

Interpretation and dissemination of technical material

Factors which determine eligibility of schools to participate

Schools must make written application for participation in the program. Approval is made on the basis of need and attendance. Schools approved for participation enter into an agreement with the State Education Department for administering the program.

Understanding role of local sponsor

Pass out application and agreement to examine and identify responsibilities of local sponsors.

Operate nonprofit lunch program and use income only for program purposes.

Limit operating balance to level consistent with program needs.

Serve lunches which meet minimum requirements for a Type A lunch during a period designated as the lunch period by the school.

Price the Type A lunch as a unit.

Supply lunches, without cost or at a reduced price, to all children determined by school authorities to be unable to pay full price.

Submit claims for reimbursement in accordance with procedures established by the Department.

Maintain proper sanitation and health standards in conformance with all applicable State and local laws.

Purchase, in as large quantities as may be efficiently used, foods in plentiful supply.

Accept and use, in as large quantities as possible, foods offered as donation by the US Department of Agriculture.

Maintain necessary facilities for storing, preparing, and serving food.

Maintain full and accurate records.

Make program records and accounts available for audit or review, upon request.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Additional responsibilities essential to successful operation:

- Employment and personnel policies
- Purchase and procurement of food
- Charge to child, policy on free lunches
- Business management methods
- Local, State, Federal laws which affect operation—social security, retirement benefits, sanitation, etc.
- Physical facilities and equipment for lunchroom
- Encourage relationships using lunchroom to supplement classroom teaching

Developing appreciation for characteristics of a good school lunch program in the total school system

Plan group discussions to establish which local responsibilities are administrative and which are operational. Make a list of those for administrator and those for program director.

Administrative responsibilities

Clarify understanding of program objectives and policies, school lunch administrative policies and procedures, characteristics of well-administered school lunch program.

Fully understand functions the authorized representative performs in operating program.

Set up administrative pattern so program may function to full potentiality.

Make periodic evaluations and appraisals to determine progress and development.

Management responsibilities

Menu planning to meet Type A requirements.

Purchasing, receiving, storing of supplies.

Food preparation and service.

Records and reports.

Public relations for faculty, students, community.

Evaluate operational activities of the program.

Take corrective action on deficiencies.

Plan for in-service training.

Establish and/or maintain high standards of operation.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding values derived by participation in the program	Plan buzz groups to discuss and determine program values to be achieved. Eating in groups teaches children acceptance of wider variety in foods resulting in improved nutrition status and readiness for learning. Laboratory for practicing good nutrition. Encourages proper dining behavior. Number of children eating in school has steadily increased so that greater number are receiving at least one good meal a day. Provides opportunity for the child to enjoy good food prepared under sanitary conditions and served in attractive surroundings.

Evaluation

Develop a chart to show the agencies and responsibilities of each agency in the operation of a school lunch.

Review your own program and check assignments made for various responsibilities.

Use a go-around, pop-up session for class participants to show how discussion has increased their understanding of the objectives and organization of the School Lunch Program.

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Bulletins and Pamphlets

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Films

N. Y. State Department of Health. The school that learned to eat. 16 mm. color. 20 mins.

Film Library, ASFSA Headquarters Office. PO Box 8811. Denver, Colo. Why school lunch. Filmstrip with record. Color. 20 mins.

Topic 2

PLANNING NUTRITIOUS MENUS

Through good menu planning, appetizing, nutritious lunches can be served to children at a price they can afford to pay.

Menu planning is a challenge as well as a responsibility. A good menu is more than a list of foods. It should:

Reflect the components of the Type A pattern

Show the amounts of foods and recipes to be used

Offer variety in food combinations that are attractive to the eye and appealing to the appetite

Consider food habits of the community and time and ability of the workers to prepare

Provide the basis for activities and operation of the School Lunch Program

Offering a variety of wholesome food does not assure the selection of a nutritionally adequate meal. The plate lunch, a planned group of foods sold for less money than the same foods if sold as individual items, is intended to provide and encourage selection of a satisfactory lunch.

Properly planned, attractively served, and eaten lunches make valuable contributions to the health and well-being of children in a noon-hour situation conducive to good social learnings.

Some suggestions for planning attractive, nutritious lunches to meet the Type A requirements are included in the section that follows:

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding significance of food and health	Plan group discussions to bring out: The reasons for eating; The reasons for following nutritional patterns such as the basic 7, essential 4, wheel of good eating; The reasons why planning is important for good nutrition.
Understanding factors in good menu planning	Using a chalkboard, list and explain how the following factors influence menu planning: Nutritional requirements Appetite appeal such as flavor, color, texture, shape (plate arrangements) Cost in relation to money available Selection of food in season for maximum nutritive value at best price Racial and social backgrounds

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Use of time, ability of workers, type and amount of equipment available for preparation Examine sample menu and indicate how the above factors have been considered.
Develop an understanding of *special requirements* for school lunch menus and the reasons for the Type A pattern	Present the requirements of the Type A pattern as stated in the National School Lunch Program Regulations. Refer to card A-1 PA-271 Recipes—Type A School Lunches. Using the flannel board presentation "Building Better Type A Lunches," explain the special contributions of each of the designated food groups in meeting the lunch requirements. This is available from School Lunch Supervision, State Education Department, Albany, New York 12224. Protein-rich foods: Two ounces must be supplied, from meat, fish, poultry, eggs, cheese, dried beans, peas, or peanut butter, in one main dish; or one main dish and one other item. Additional protein is provided in other foods used in the lunch. Vegetables and fruits: Three-fourths cup must be provided from at least two, or three different sources. A Vitamin C-rich food should be included daily and a Vitamin A-rich food twice a week. Bread One slice, or its equivalent of yeast or quick bread, must be enriched or whole grain. Butter or fortified margarine Two teaspoonfuls must be used as a spread for bread, as a seasoning, or in preparation of other foods in the lunch. Milk One-half pint of fluid whole milk which meets minimum butterfat and sanitation requirements of State and local laws must be used as a beverage. Milk used in cooking is additional. Show slides "Nutrients in a Type A School Lunch" to review requirements and how to meet them in planning menus. These slides may be borrowed from School Lunch Supervision, State Education Department, Albany, New York 12224. Display two Type A menus indicating that portions are minimum and discuss how each lunch meets requirements. Point out that portions may be increased or additional foods used for different age groups.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Pass out, or put on chalkboard, menus that are deficient in one or more food items necessary to meet Type A requirements. Have class and food item(s) in sufficient quantity to complete the patterns.

Developing technique for planning Type A menu

The menu is the basis for operation of the school lunch program. It is essential to acquire skill in planning. Discuss the conditions, factors, and tools needed to plan.

Arrange a comfortable place conveniently equipped.

Plan adequate time on a specified day of the week.

Have reference materials available such as the following:

PA-264 *Planning Type A School Lunches*
PA-271 *Recipes—Type A School Lunches*
PA-270 *Food Buying Guide for Type A Lunches*
Plentiful food and school-lunch-specials lists
Market reports and quotations
Trade magazines
Menu record file
Direct distribution foods and purchased foods inventories
Menu planning work sheet

Use Activity Sheet 1 and discuss how to plan a Type A menu according to steps outlined in PA-264.

Select protein-rich main dish for each day. Calculate or indicate amount that may be counted toward meeting requirements.

Select vegetables and fruits. Plan Vitamin C-rich daily. Plan Vitamin A-rich twice a week. Include other fruits and vegetables to make ¾ cup—need for variety.

Decide on appropriate bread.

Include milk and butter or fortified margarine.

Include additional foods, as needed, to meet energy requirements of children.

Determine per serving cost.

Indicate recipe numbers on menu forms.

Consider special items for special days.

Prepare market order.

Prepare work schedule.

Display food portions to meet requirements:

1 oz.-2 oz. stick of cheddar cheese;
2 tbs.-4 tbs. peanut butter;
2 oz. cooked meat, fish, poultry, and raw amounts of each needed to obtain cooked portion.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Demonstrate the use of PA-270 *Food Buying Guide for Type A School Lunches* to determine quantities to use in preparation. Look up amount of given item that would have to be purchased to serve 100 ½-cup servings of shredded cabbage, pounds of ground beef for 100 2-ounce servings. Demonstrate on blackboard how to figure quantity of dried beans needed to provide 150 ½-cup servings. Stress point that any amount over ½ pound would be raised to 1 pound. Also, the quantity of fresh spinach needed to provide 150 ½-cup servings of cooked spinach. Stress the point that amounts must be adjusted to provide for variations due to quality of products, skill, and experience of workers. If the quantity is ½ pound or over, it should be raised to 1 pound. Have group members complete Activity Sheet 2 to calculate the amounts of food needed for various participations; Activity Sheet 3 to calculate the amount of protein-rich food needed when the food meets one-half the requirements; Activity Sheet 4 to evaluate quantities of fruits and vegetables.
Developing appreciation for values of preplanning and effects of preplanning on overall school lunch operation	Discuss with group the following advantages of preplanning school lunch menus. Type A requirements will be met each day with better variety in adequate amounts. Costs can be determined and are better controlled. Better buying techniques may be used. The preplanned menu is the first line of control because it tells what is to be purchased. It determines the frequency of purchases and deliveries. Time and work schedules can be made so that each worker knows and understands her job. Direct distribution foods can be planned to best advantage in providing variety and controlling costs. Low-cost seasonal foods will be used when they are most economical and at peak of quality and nutritional value. Principles of good menu planning will have been followed so that meals will be appetizing in flavor and texture and be attractive on the plate.
Understanding need to evaluate menu for adequacy and appeal	Discuss the importance of evaluating the menus as a final step in planning. Examine the 10 questions of evaluation listed on page 10 of the publication PA-264. Have groups exchange planned menus for evaluation and discussion of evaluation with group that planned the menus.

SUGGESTED CONTENT AND ACTIVITIES

Working in groups, use Activity Sheet 5 to plan school lunch menus for specific time, group, and number.

Evaluation

Plan two Type A menus which illustrate principles of menu planning.

Indicate foods which contribute to the requirements of the Type A pattern and the contribution of each.

Use one of the above menus to calculate the amounts of foods to be prepared for participations of 300 and 550.

What size portions would be served for first grade, sixth grade, senior high school, adults?

Set up sample Type A lunch trays to show plate arrangements and portions. Evaluate in terms of appetite and sales appeal.

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Available to school lunch programs. No charge. Must be ordered from N.Y. State Education Department, School Lunch Supervision. Albany, 12224

Slides, Films

New York State Education Department, School Lunch Supervision. Albany, New York 12224

Nutrients in a Type A school lunch
Let's have more Vitamin A and C in school lunches

ACTIVITY SHEET 1
TOPIC 2

Suggested Menu Planning Form
Type A Lunches

Date School

Week Month Year

	Menus	List Kinds and Amounts of Foods Which Contribute to Type A Requirements				Additional Foods
Number of Lunches	Include a Vitamin C food daily and a Vitamin A food at least twice a week	Protein-rich in main dish or main dish and one other menu item	Vegetables and fruits, 2 or more	Bread, enriched or whole grain	Butter or fortified margarine	As needed to meet energy needs of children
	½ pint milk					
Planned						
Served						
	½ pint milk					
Planned						
Served						

ACTIVITY SHEET 2
TOPIC 2

Determine Amounts to Be Used

Complete this exercise by:

1. Showing in column (b) the size of one ready-to-eat serving of food
2. Referring to your *Food Buying Guide* for the number of servings per purchase unit to be entered in column (c)
3. Figuring the amount of food required for estimated number to be served by dividing the estimated participation by the number of servings per purchase unit

Food (a)	Size of One Serving (b)	Number of Servings Per Purchase Unit (c)	Estimated Number to be Served (d)	Quantity of Food Needed (e)
Beef stew meat				
Dried beans				
Frozen fish fillets				
Ground beef				
Turkey				
Peanut butter				
Cheese				
Mashed potato				
Canned cherries				
Frozen green peas				
Shredded cabbage				
Canned green beans				

ACTIVITY SHEET 3
TOPIC 2

Amount of Protein-Rich Food

Protein-Rich Food	Size of Serving	Number of Servings Per Purchase Unit	Estimated Number to be Served	Quantity of Food Needed
Cheddar cheese				
Luncheon meat				
Tuna fish				
Frankfurters				
Cured ham, boneless				
Pork and gravy				
Eggs				
Cottage cheese				

ACTIVITY SHEET 4
TOPIC 2

Amounts of Fruits and Vegetables

This is a simple formula concerning the fruit/vegetable part of the Type A lunch to determine whether you have met the ¾ cup requirement.

1. Determine the total number of ½-cup servings for the day's lunch.
2. Number of ½-cup servings times 2 equals total number ¼-cup servings.
3. Total number of ¼-cup servings divided by 3 equals number portions of ¾ cup each.

Example

Potatoes 50 lbs. × 3¼ = 162 ½ cup servings
Frozen peas 18 lbs. × 4¾ = 85 ½ cup servings
Blueberries 5 No. 10 × 24 = 120 ½ cup servings

367 ½ cup servings
×2

734 ¼ cup servings

734 ÷ 3 = 244 portions of ¾ cup each.

Evaluate the following quantities of food to determine whether the fruits/vegetables were adequate for the number of lunches indicated.

103 lunches:	Cabbage	8 lbs.
	Canned green beans	4 No. 10
	Red sour cherries	3 No. 10

188 lunches:	Carrots	10 lbs.
	Potatoes	30 lbs.
	Frozen spinach	20 lbs.

408 lunches:	Lettuce	20 lbs.
	Tomatoes	40 lbs.
	Kernel corn	11 No. 10
	Purple plums	10 No. 10

155 lunches:	Celery	3 lbs.
	Apples	9 lbs.
	Green peas	5 No. 10
	Tomato juice	3 No. 10

ACTIVITY SHEET 5
TOPIC 2

Menu and Daily Record of Amounts Served

Total Number	Milk	Protein-Rich	Amount Served	Vegetables and Fruits			Amount Served	Bread	Butter or Fortified Margarine	Additional Foods
				Vit. A	Vit. C	Other				
	Mon.									
	Tues.									
	Wed.									
	Thurs.									
	Fri.									
* Plentiful and donated foods										

Topic 3

IMPROVING MANAGEMENT PRACTICES

Good management practices are essential to provide well-planned, well-prepared, and low-cost meals. Serving good food efficiently and economically requires organization and work plans, good personnel relationships, wise purchasing practices, and proper handling of food. All School Lunch personnel should understand the values of records to analyze the total food service operation.

In order to help individuals improve these management practices, the material in this section has been organized in four units.

Personnel Management

Wise Purchasing Practices

School Lunch Records and Their Use

Sanitation, Safety, and Storage

As plans are made by local groups, consideration should be given to including one or two of the most needed units for the initial program. Other units might be used in future program planning.

Personnel Management

The degree of success of any group activity depends on the ability of individuals involved and their willingness to coordinate their efforts with others. Therefore, each employee should recognize the importance of his responsibilities as a part of the school lunch department and total school program. Each should recognize the values in self-improvement in order to maintain high standards of food service and his share in establishing good group morale.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Assuming responsibility to promote the goals of the program	Review the goals and discuss ways personnel can contribute to their achievement. The school meal will foster good food habits and contribute to health if it meets the following criteria: The meal fulfills its nutritional purpose by meeting Type A requirements. Quality food is served that is accepted and eaten. Efficient management makes it possible to serve low-cost meals. New foods are made tempting to encourage their acceptance. Menus are not monotonous. Children learn good social behaviors if those who serve the lunch: Understand children and their needs; Set an example in dignity and courtesy over the counter; Provide attractive surroundings, smooth functioning service, and an unhurried atmosphere.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding their role in the school lunch program	Interpret policies related to employees and their responsibilities in the program, such as hours of work, wage scale benefits, need for cooperation with student, faculty, and community groups for special functions. Review these policies included in local handbook. Show good and poor qualities and attitudes of personnel through role playing. Use films to promote discussion of the contribution of good grooming and personal habits to improved standards of food service. Demonstrate good and poor personal appearance, using models. Discuss the importance of suitable uniforms for employees. Invite the personnel manager of a local industry, restaurant, or the guidance director to give a talk. Point up personal qualities such as getting along together, pride in a job well done, and need for sharing skills with others. Give each member a self-evaluation sheet. Discuss its uses and values. Examine reports to interpret the monthly operation. Reviewing reports will keep employees informed and encourage personnel to share in plans for improvement.
Recognizing their responsibility to children, school staff, and the public	Invite a nutritionist, school nurse, or doctor to discuss the effect of growth and development of children, family eating patterns, religion, and emotions on food habits. Plan and present a skit showing how the attitudes of personnel over the counter influence relationships with customers. Following the skit, discuss the effect of these attitudes on food acceptance and participation. Explain how dietary requirements of adults differ from those of growing children and the need to provide a choice of foods suitable for them. Discuss the opportunity which food service for special occasions offers for interpreting the school lunch program to student, faculty, and community groups. Invite a member of the administrative staff or board of education to discuss the significance of the individual's loyalty to the school and public and channels of authority within the school district. List on chalkboard ways personnel can promote and interpret the program to the public.
Understanding the values of well-organized work plans	Plan ways to develop work assignments for a program serving 200 people, using four workers and two student helpers. Consider the jobs to be done, time for each, and order of performance.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Discuss values in developing and using work plans. Discuss the need for training students, use of assignment sheets, ways personnel can share in student training, values of student School Lunch Club for upgrading performance. Distribute sample daily work plan (Activity Sheet 1, Topic 3) and discuss values in following such a plan.
Developing the ability to find improved methods of doing a job	Select two group members to demonstrate the making of a familiar food such as meat loaf or muffins. Group will observe organization of work, placement and use of equipment and small tools. Have group discuss ways time and energy could be saved. Study a bulletin board display of time and labor-saving equipment. Show efficient use of equipment and methods of work through films and demonstrations. Equipment—use of scales, measures, ladles, scoops; portable equipment; suitable working heights for comfort. Organization and method—arrangement of equipment in best sequence. Show use of both hands such as coating fish or in salad making. Use illustrations in discussion of motion study for efficiency.

Evaluation—Group Report

How has this unit helped you to recognize your responsibilities to the total school lunch program?

What have you learned to help organize work, to do it in the best way, in the shortest time, and with the least effort?

REFERENCES

Books

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Journal of the American Dietetic Association. 620 N. Michigan Ave., Chicago, Ill. 60611

School Lunch Journal. American School Food Service Association. PO Box 8811, Denver, Colo. 80210

Films

Aluminum Cooking Utensil Company. New Kensington, Pa. Magic knife. 16 mm. Color. 20 mins.

American Institute of Baking. 400 E. Ontario St., Chicago, Ill. 60611. Modern sandwich methods, school lunchroom version. 35 mm. 33⅓ rpm turntable for record. Color. 24 mins.

Iowa State College, Visual Instruction Service. Ames, Iowa. Introducing the new worker to his job. 16 mm. Black and white. $1.15 for 3 days

———Maintaining quality standards. 75¢ for 3 days

New York State Department of Health. Health Film Library, 84 Holland Ave., Albany, New York 12208. Food preparation. 16 mm. Color. 13 mins.

Syracuse University, Film Library. Syracuse, N.Y. Salad preparation. 16 mm. Color. 14 mins.

Wise Purchasing Practices

School lunch personnel should understand the relationship between the cost of food and total operating expenses. This unit includes ways to analyze buying practices and to apply these learnings to day-by-day operation of the program.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Selecting foods that contribute to menu requirements and offer the best in food values for the price	Review revised menu requirements. Refer to form SL-2 School Lunch Program Agreement and the USDA pamphlet PA-264, *Planning Type A Lunches.* Compare a Type A menu with one that includes costly items which add little to the nutritional value. Example: "Specialty Items" such as pickles, olives, crackers, and potato chips. Emphasize nutritional benefits to children, since many may eat these items and leave other more nutritious food on menu. However, occasional use adds color, texture, and eye appeal to menus. Arrange an exhibit to show per-serving cost and nutritive value of some specialty items.
Understanding the cost and contribution to menu requirements of some ready-prepared versus kitchen-prepared foods and the value of government commodities in the school lunch program	Distribute Activity Sheet 2, Topic 3, and figure comparative costs of ready-prepared versus kitchen-prepared foods. Emphasize money saved by using donated foods in homemade products. Discuss use of savings to offset labor and operational costs; to serve more attractive main dishes; fresh vegetables, and fruits to improve quality and nutritional values of the meal. Evaluate the contribution to Type A requirements of some commercially prepared protein-rich combination foods. Refer to Activity Sheet, Topic 3. Determine the following: Quantities of protein-rich food and vegetables needed to supplement these foods when used in Type A menus; Portion cost and food value using a sample problem. Use chart to display price per case and total value per year of donated foods received in your school. Discuss why government foods are offered and how they affect the school lunch operation.
Analyzing ways to determine the wise selection of foods	Cut and examine different grades of fruits and vegetables. Have the group complete Activity Sheet 4, Topic 3, Rating Sheet for Canned Fruits or Vegetables.
Canned fruits and vegetables	Compare yield with those given in PA-270, *Food Buying Guide.* Draw conclusions as to "best buys."

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Using the flannel board, illustrate the cost of various forms of foods such as peach halves versus sliced peaches, pineapple rings versus broken slices and tidbits. Discuss purchasing food in relation to use in menus.
Fresh, canned, and frozen fruits and vegetables	Compare the cost per serving of fresh, canned, and frozen foods, using Activity Sheet 5, Topic 3. Discuss cost in relation to food value, texture, color, eye appeal, and use in menu. Set as a goal in a menu the daily use of no more than one canned food.
Meats, fish, and poultry	Plan group activities. Select several in the group to set up displays to show the following: Cost of 2 ounces of protein-rich foods, such as peanut butter, ground beef, and fish sticks. Refer to the *USDA Food Buying Guide.* Display good or poor quality stew meat, poultry, wieners, and roast beef. Discuss guides in selection and simple specifications.
General considerations	Use 2 weeks' menus to discuss the following: Purchasing in relation to menus Use of donated foods on hand. Emphasize use within distribution period. Evaluate factors affecting quantities in purchasing. Using an exhibit of various sized cans and packaged units, discuss the following: Weight and servings per can Need to buy some small units for use in adult meals, á la carte sales, and sandwich fillings Keeping qualities, frequency of use, and storage facilities Use a flip chart to study the comparative cost of various sized cans or units of food. Indicate weight or size, price, and savings when buying in large quantities. Examples as follows: Macaroni 1 lb. versus 4 lbs. Green beans No. 303 can versus No. 10 can Tuna fish 7 oz. can versus 4 lb. 2 oz. can

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding the story labels can tell	Display label from cans and packages. Discuss: Requirements of the Pure Food, Drug and Cosmetic Act Label requirements such as testing ingredients in order of their predominance, grade, amount, and description of contents Advantages to be gained from reading labels
Knowing how to develop a satisfactory system for purchasing foods	Explain briefly the purpose and value of written specifications: Uniform and consistent standards help keep food cost down. Personnel should be aware of size, content, grade, brand, variety, and pack as foods are used and report standards to the school lunch manager to be sure specifications are met. Clarify the need for and use of written purchase orders. Distribute sample purchase order forms. Column headings might include food, quantity, description (quality or grade), unit price, total. Fill in one or two sample items. Discuss ways to keep currently informed. Obtain price quotations from two to five reliable wholesalers as to price, quality, and deliveries. Read *School Lunch News and Notes.* See school lunch specials and plentiful foods. Study newspaper releases and radio reports. Interpret values of placing orders on a regularly scheduled basis. Establish a time during the day to interview salesmen. Plan a group activity to show the importance of checking in foods at time of delivery and before signing invoices. Emphasize this procedure for receipt of donated foods. Have group estimate weight of plastic bags of apples, spinach, or carrots that appear the same size but vary in weight. Have group check actual weight on scales. Display 50 lb. package ground beef with bill signed by the cook. Have group weigh meat. Actual weight 48 lbs. Therefore, you have paid for 2 lbs. of meat not received. At 45¢ a pound, this is a loss of 90¢.

Evaluation

Have group work out the following problems:

1. A school lunch program serves 200 meals daily. The school is located in a small rural community. Facilities include a large, cool storeroom, walk-in refrigerator with deep-freeze compartment.

   Plan menus for 2 weeks. List points to consider in purchasing foods for this school lunch situation.

2. Have each person report to the group something she has learned and plans to put into practice in her own school to improve the efficiency of the school lunch program.

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Superintendent of Documents. Govt. Ptg. Off. Washington, D.C. 20402. Shoppers' guide to U.S. grades of foods. Home and Garden Bulletin. No. 58. 1962. 10¢

———USDA grade marks and the foods on which they are used. AMS-242. December 1958

———Food buying guide for Type A school lunches. PA-270. 1955. 25¢

Slides

New York State Education Department, School Lunch Supervision. Albany, New York 12224. Preparing a school lunch. 35 mm. filmstrip. Double frame horizontal pictures, color, 28 frames. 2 inches x 2 inches. Script included. Prepared by USDA

ACTIVITY SHEET 1
TOPIC 3

DAILY WORK PLAN

The manager should make a daily work plan for herself and the workers. This will vary according to the lunch being prepared and served. She should also indicate on the daily work plan the time that each job should be started.

The menu for a Type A lunch to be served to 150 pupils and a suggested work plan for a cook-manager and her assistant are shown below.

MENU

Ground beef and spaghetti
Fresh green beans
Hot biscuit, butter or fortified margarine
Orange slices
Raisin cookie
Milk

Afternoon of Day Before Menu is Served (1:30-3:30 p.m.)

Cook-Manager	*Assistant*
Make and bake cookies. (Use 1½ recipe—Card C-25, Variation 1.) Store in covered container.	Finish lunch dishes. Clean up kitchen and dining area.
Weigh biscuit mix (as per Card B-1). (9¾ lbs. or 2 gal. less ½ cup.) Put in mixing bowl and cover.	Wash 22 lbs. green beans. Cover with damp cloth and refrigerate.
Grate cheese for main dish. (Card D-31) (3 lbs. or 3 qts.) Wrap in waxed paper and store in refrigerator.	

Morning of Day Menu is Served

8:00	Assemble ingredients and tools for main dish. (Ground beef and spaghetti D-31—1½ recipe)	Peel and wash 3½ lbs. onions for main dish.
8:30	Chop onions and cook main dish. Set aside.	
10:00	Mix biscuit dough. Roll, cut, and pan. Set aside. Heat water for beans.	Finish preparing green beans for cooking. Place in two 5-gallon stock pots.
10:30	Start cooking green beans. (Card J-3).	Wash and slice 75 medium-size oranges. (½ orange per serving.) Refrigerate.
10:40	Rest Period	
10:50	Reheat main dish.	Cut butter (3¼ lbs.). Arrange on squares of waxed paper, stack, and refrigerate.
11:00	Bake biscuits.	
11:15	Drain beans and pan for serving. Add seasoning.	Set up serving counter with cold food (milk, butter, oranges, cookies), also serving tools.
11:20	Take hot food to serving counter.	Assist with serving food.
11:30	Serve food.	

ACTIVITY SHEET 2
TOPIC 3

COMPARATIVE COSTS OF READY-PREPARED VERSUS KITCHEN-PREPARED FOODS

Food Item	*Cost Per Unit	**Number of Servings Per Week	Cost Per Serving	Comments
Fish				
Purchased sticks	lb.			
Fish fillets (ocean perch)	lb.			
Turkey				
Canned	lb.			
Ready-to-cook	lb.			
Dry Beans				
Purchased, canned	#10			
Uncooked	lb.			
Mixed fruits				
Canned fruit cocktail	#10			
Made at school using fresh and/or canned fruit	100 (portions)			
Chocolate pudding mix				
Purchased	5 lbs.			
Made at school (recipe card No. C-38)	5 lbs.			
Plain cake mix				
Purchased	5 lbs.			
Made at school (recipe card No. C-24)	5 lbs.			
Bread				
Purchased light-bread	2 lb. (loaf)			
Made at school (recipe card No. B-11)	100 (servings)			
Hamburger rolls				
Purchased	pkg.			
Made at school (recipe card No. B-17)	100 (servings)			

* Secure costs per unit locally. With reference to recipe costs, compute costs on basis of 100 servings.

** Use Food Buying Guide to determine number of servings whenever applicable; otherwise, use number of recipe portions.

ACTIVITY SHEET 3
TOPIC 3

Contribution of Certain Commercially Prepared Foods (Refer to *Food Buying Guide*, PA-270, Revised January 1964)

Food Item	Food Buying Guide Page #	Size Serving	Protein-Rich Food	Vegetable	Purchase Units	
					100 Servings	Supplemental Foods Needed
Beef stew	24	¾ c.	1 oz.	¼ c.		
Beef goulash	24	¾ c.	1 oz.	0		
Chili con carne with beans	24	½ c.	2 oz.	0		
Hash	24	¾ c.	2 oz.	¼ c.		
Soups						
Vegetable beef	65	1 c.	0	¼ c.		
Split pea	65	1 c.	1 oz.	or ¼ c.		
Chicken a la king	26	¾ c.	1 oz.	0		

ACTIVITY SHEET 4
TOPIC 3

RATING SHEET FOR CANNED FRUITS OR VEGETABLES

Develop form for rating canned fruits or vegetables prior to workshop. The following columns or headings are suggested for your information:

1. Kind of Food
2. Code or Other Identification
   (May be brand name whenever form is used to record information of purchased foods in own school)
3. Type and Style
4. Size of Containers
5. Label Weight; Net Weight
6. Actual Weight (Food and Liquid)
7. Drained Weight (in Ounces)
8. Total Number of ½-Cup Servings
9. Count of Fruit
10. Syrup or Liquid
11. General Appearance and Texture
12. Color
13. Flavor
14. Cost Per Case
15. Cost Per Can or Unit
16. Cost Per ½-Cup Serving
17. Remarks and Rating

ACTIVITY SHEET 5
TOPIC 3

GUIDE FOR COMPARING THE COST PER SERVING OF FRESH, CANNED, AND FROZEN VEGETABLES AND FRUITS

This guide was prepared to help school lunch managers compare the cost per serving of fresh, canned, and frozen vegetables and fruits. Such comparisons are highly desirable in order to make the best use of the vegetable and fruit dollar and to provide more variety in forms and types of vegetables and fruits served in the school lunch program. The cost per serving data are based on the yield figures given in the *Food Buying Guide,* PA-270.

To use this guide, first determine the current price per unit (pound or No. 10 can) of the items to be compared and locate the price of the items in the appropriate column—Fresh (Column 2); Canned (Column 3); Frozen (Column 4); and compare the cost of a ½-cup serving (Column 5).

> *EXAMPLE:* If *fresh broccoli costs 10 cents a pound* and *frozen broccoli costs 26 cents a pound,* the *cost of a ½-cup serving* of the *fresh broccoli would be 4 cents* and the *frozen would be 5 cents.*

On deciding on the item to buy it is important to keep in mind the time and cost involved in preparing fresh vegetables and fruits versus those ready-to-cook (canned or frozen) which require little time to prepare.

Following the method described above, the guide can also be used to compare the cost per serving of different kinds of vegetables and fruits, i.e., green peas vs. green beans, broccoli vs. spinach, peaches vs. strawberries, etc.

GUIDE FOR COMPARING COST PER SERVING OF SELECTED FRESH, CANNED, AND FROZEN VEGETABLES AND FRUITS

VEGETABLES:	FRESH Per Pound	CANNED Per No. 10 Can	FROZEN Per Pound	The Cost of a ½-Cup Serving Would Be:
When *broccoli* costs	8¢		16¢	3¢
	9¢		18¢	3½¢
	10¢		21¢	4¢
	11¢		24¢	4½¢
	12¢		26¢	5¢
	14¢		29¢	5½¢
	15¢		32¢	6¢
	16¢		34¢	6½¢
When *carrots* cost	8¢	$0.44	10¢	2¢
(fresh, without tops)	11¢	.55	13¢	2½¢
	13¢	.66	16¢	3¢
	15¢	.77	18¢	3½¢
	17¢	.88	21¢	4¢
	19¢	.99	24¢	4½¢
	21¢	1.10	26¢	5¢
	23¢	1.21	29¢	5½¢
	26¢	1.32	32¢	6¢
	28¢	1.43	34¢	6½¢
When *corn* costs		.60	14¢	3¢
(whole kernel)		.70	17¢	3½¢
		.80	19¢	4¢
		.90	21¢	4½¢
		1.00	24¢	5¢
		1.10	26¢	5½¢
		1.20	28¢	6¢
		1.30	31¢	6½¢
When *green beans* cost	14¢	.60	16¢	3¢
	16¢	.70	18¢	3½¢
	18¢	.80	21¢	4¢
	20¢	.90	24¢	4½¢
	22¢	1.00	26¢	5¢
	25¢	1.10	29¢	5½¢
	27¢	1.20	32¢	6¢
	29¢	1.30	34¢	6½¢
When *green peas* cost	6¢	.57	14¢	3¢
	7¢	.66	17¢	3½¢
	8¢	.76	19¢	4¢
	9¢	.86	21¢	4½¢
	10¢	.95	24¢	5¢
	11¢	1.04	26¢	5½¢
	12¢	1.14	28¢	6¢
	13¢	1.24	31¢	6½¢
When *kale* costs	10¢	.44	11¢	3¢
	12¢	.51	13¢	3½¢
	14¢	.58	15¢	4¢
	16¢	.65	17¢	4½¢
	18¢	.72	19¢	5¢
	19¢	.80	21¢	5½¢
	21¢	.87	22¢	6¢
	23¢	.94	24¢	6½¢

GUIDE FOR COMPARING COST PER SERVING OF SELECTED FRESH, CANNED, AND FROZEN VEGETABLES AND FRUITS

VEGETABLES: (Continued)	FRESH Per Pound	CANNED Per No. 10 Can	FROZEN Per Pound	The Cost of a ½–Cup Serving Would Be:
When *lima beans* cost	6¢	$0.63	16¢	3¢
	7¢	.74	18¢	3½¢
	8¢	.84	21¢	4¢
	9¢	.94	24¢	4½¢
	10¢	1.05	26¢	5¢
	11¢	1.16	29¢	5½¢
	12¢	1.26	32¢	6¢
	13¢	1.36	34¢	6½¢
When *mixed vegetables* cost		.57	14¢	3¢
		.66	17¢	3½¢
		.76	19¢	4¢
		.86	21¢	4½¢
		.95	24¢	5¢
		1.04	26¢	5½¢
		1.14	28¢	6¢
		1.24	31¢	6½¢
When *spinach* costs	8¢	.44	11¢	3¢
	10¢	.51	13¢	3½¢
	11¢	.58	15¢	4¢
	12¢	.65	17¢	4½¢
	14¢	.72	19¢	5¢
	15¢	.80	21¢	5½¢
	16¢	.87	22¢	6¢
	18¢	.94	24¢	6½¢
FRUITS:[1]				
When *peaches* cost	10¢	.72	10¢	3¢
	12¢	.84	11¢	3½¢
	14¢	.96	13¢	4¢
	16¢	1.08	15¢	4½¢
	18¢	1.20	16¢	5¢
	19¢	1.32	18¢	5½¢
	21¢	1.44	20¢	6¢
	23¢	1.56	21¢	6½¢
When *strawberries* cost	23¢		10¢	3¢
(fresh, per quart)	27¢		12¢	3½¢
	31¢		14¢	4¢
	35¢		16¢	4½¢
	39¢		18¢	5¢
	43¢		19¢	5½¢
	46¢		21¢	6¢
	50¢		23¢	6½¢

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[1] Cost per serving of fresh peaches and strawberries is on a raw fruit basis.

School Lunch Records and Their Use

All school lunch personnel should understand why records are important and how to use information provided for a successful school lunch operation.

It is recognized that each situation such as a large central school district with multiple units, a single unit, or a central kitchen, has problems peculiar to itself so that no set of records would be entirely suited to a particular school lunch program.

Each school lunch director or manager will need to adapt the following unit to her situation, using her own record forms to interpret their use and value for a successful operation. Some activities and content may apply only to the responsibilities of the school lunch managers and/or person in charge of each building program.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Developing an appreciation of the need for records	Explain the purposes of keeping records to: Evaluate the use of time, food, and money Save time and effort Plan for the future based on facts from present records Interpret records to substantiate data for Monthly Claim for Reimbursement (SA-602) Refer to Activity Sheet 6, Topic 3, to explain meal count information needed. Lunches served to student helpers are to be counted as free only if their selection was based on the need for free lunches. Illustrate approved methods of counting lunches by using coded cash register tapes, tickets, tokens, numerators, and tally sheets. Using Activity Sheet 6 (reverse side), explain categories of information needed for cash income and expenditures. Allocation Request Form for Receipt of Donated Foods (SA-304) Explain a la carte meals that may be counted and the purpose of this information. An a la carte meal is defined as a combination of two or more foods exclusive of milk, ice cream, or any other resale item served to a student. Discuss the importance of keeping accurate inventory records of all donated foods on hand. Report on the Allocation Request Form (SA 304).
Understanding the need for records to carry out a food and cost control program	Explain the use of forms for each of the following: Purchase Order Form Emphasize the need for accuracy when checking in food and supplies. Examine for shortages, quality, and damage before accepting. Food Inventory Explain purposes

SUGGESTED CONTENT AND ACTIVITIES

Gives a clear picture of the movement of commodities and focuses attention on those not being used regularly

Prevents loss through spoilage

Helps to buy only what is needed and can be used effectively. This record will indicate quantities to buy in the future.

Helps to lower cost of lunch. Helps to serve adequate lunches.

Discuss ways to keep an inventory

Method will vary with size of operation. An inventory can be kept in a ledger, individual index cards, or a notebook, using a page for each item. Keep it simple, accurate, and current.

Enter information required on form *each day* if using a perpetual inventory. Make one person in each building responsible for maintaining inventory.

Check record inventory periodically with actual count of items on shelves.

Explain importance of an accurate inventory of donated foods.

Refer to *Food Storage Guide,* PA-403, page 31. Activity Sheet 7, Topic 3. *School Business Management Handbook,* No. 8, School Lunch, pp. 105, 107, 113.

Monthly Statement

Analyze the percentage for food, labor, and other costs, using your Monthly Statement and Activity Sheet 8.

Compare with recommended percentages.

Food	55-65 percent
Labor	30-40 percent
Other operating costs	1-5 percent

This will indicate areas where costs are excessive, if enough is spent for food, and if the amount of labor is adequate.

Summarize at end of year to determine average percentage costs.

Recipe Cost Record

Using the USDA Recipes, figure food cost with and without the value of donated commodities.

Statisticians allow 1¢ per lunch for flavoring, condiments, and minor ingredients. Refer to Activity Sheet 9.

Menu Cost Record

Explain the use of Activity Sheet 10, Topic 3

Plan a group activity. Give each member a blank sample form to figure the cost of a menu. Check Type A requirements and

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	quantity of food to use in the menu for 100. Refer to inventory for unit costs. Determine the amount of money per meal that can be spent on food, labor, and other costs in relation to income, using Activity Sheet 10. Evaluate menu food cost figured in the group activity. A La Carte Costing If a la carte items are offered, cost food used in preparation. Usually this cost is doubled to determine the selling price. This is necessary to cover labor and other costs and the loss of income from reimbursement.
Recognize the need for some additional records.	
Budget	Discuss the need for an annual budget. Determine total annual income and expenditures for food, labor, and other costs. Evaluate in relation to anticipated volume of sales for the following year to determine any necessary changes.
Equipment	Explain how personnel can share in the annual equipment inventory and report to send to the administration such as new items needed during the coming year, items not usable, items which can be transferred to other buildings or departments. Discuss use of equipment card records and use of data provided. See topic 4, "Using and Caring for Equipment."
Personnel Record	Explain purpose of information included on employee record cards. Include such information as name, address, telephone number, date of birth, education, experience, past position and reason for leaving, performance rating on present job, and remarks that reflect ability as a school lunch employee. Use employee records as a basis for promotion, for withholding taxes, pension, sick leave, and vacations.
Analyzing records in order to set up a better plan for spending school lunch income wisely	Discuss how information from records may be used to evaluate the efficiency of operation. Provide basis for justification of meal price Show need of planning Type A menus to keep within the food cost percentage, of following planned menus, of making maximum use of donated commodities, of including foods that offer the most nutritionally for the money

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Emphasize importance of checking in supplies when delivered and following directions for issuing food from storage. Give information for analysis of amount and efficiency of labor. Refer to your monthly statement (percentage labor cost). Indicate significance of well-planned work schedules, efficient methods of preparation, use of standardized recipes to save time and money, proper portion size, and tools for serving. Show personnel responsibilities for reporting on time, maximum production on the job, and effect of absenteeism. Indicate need for economy in use of food, cleaning, paper, and other supplies. Study the percentage of participation. Volume increases income to offset operating costs. Discuss ways personnel can promote an increase in the sale of Type A lunches.
Understanding ways to use information that records provide	Explain the use of information: Provides data and statistics to keep Board of Education, parents, community informed of program progress and problems Provides information to show strengths and weaknesses of program Shows the significance of correlated school lunch and classroom activities: increased participation, less food waste, wider acceptance of a variety of nutritious foods Gives information for national use to keep Congress informed, to legislate wisely, and to show how the school lunch program supports agricultural economy. Use illustrations of ways information is being used in the school lunch program: Monthly and annual report to superintendent of schools and board of education showing efficiency and progress of program, extra services of school lunch department to class groups, teachers, and community organizations (teas, banquets, etc.), ways the school lunch program contributed to learnings of children and future needs Newspaper publicity Information in school handbooks for teachers, students, and parents Talks—faculty meetings, health committees, student council, assembly programs, PTA, other civic organizations, parent visiting days. Displays during all school functions such as Open House. Exhibits and displays in schools, in store windows, public library.

SUGGESTED CONTENT AND ACTIVITIES

Sharing in planning and development of related class activities on health education.

Discuss ways all personnel can use information.

Evaluation

In groups of two or three, class participants may:

1. List ways all personnel can make improvements which will result in the greatest value received for money spent;
2. Discuss and list suggestions for planning menus and serving the best quality food for the money;
3. List ways to use donated foods to advantage;
4. Discuss how interpretation of sample records has helped them to recognize their share in the responsibility for the success of the school lunch program.

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———School Lunch Supervision. School lunch program agreement, Form SL-2

ACTIVITY SHEET 6
TOPIC 3

SCHOOL LUNCH MEAL COUNT RECORD

School______________________________ Month____________19____

Date	Student Meals			Adult Meals	
	Type A		A La	Not To Be Claimed for Reimbursement	
	Paid	Free	Carte	With Milk	No Milk
Total					

ACTIVITY SHEET 6
TOPIC 3

INCOME AND EXPENDITURE

School______________________________

Month____________________19_____

Cash Income							Cash Expenditures						
Date	Children's Type A Lunches	Other Cafeteria Sales including milk	Other Receipts	Loans	Reimb. Checks Rec'd	Total	Date	Name of Payee or Vendor	Food and Milk	Labor	Other	Repayment of Loan	Total
Total													

ACTIVITY SHEET 7
TOPIC 3

This inventory record can be kept by individual schools. It can also be used in the case of a large multiple-unit school lunch program with a food storage warehouse. The record will be kept by the lunch or cook manager, or in the larger operations, by a stores clerk.

PERPETUAL INVENTORY AND PURCHASE RECORD

Product: ____________________ Size: ____________________

Unit: ____________________

Unit Cost— ____________________

Description: ____________________

Minimum Stock ____________________

No.	Firm or Source of Supply	No.	Firm or Source of Supply

No.	Date	In	Out	Balance	Value	No.	Date	In	Out	Balance	Value

Value based on "Latest Purchase Price"
✓ A check indicates balance was checked with physical count.
O A circle indicates minimum stock level is reached—time to reorder.
Letter C indicates correction to adjust to actual physical inventory count.

ACTIVITY SHEET 8
TOPIC 3

Suggested School Lunch Statement for Month Ending October 31. 1960

	School Lunch Fund
INCOME	
Lunch sales	$1503.40
Reimbursement earned this month	589.56
Other	400.00
Total Income	$2492.96
EXPENDITURES	
Food	
Inventory 10/1/1960	$1110.77
Total food purchased	963.97
Total	2074.74
Less—ending inventory 10/31/1960	612.80
Cost of Food Sold	$1461.94
Labor (gross)	$ 947.47
Other	26.83
Total Expenditures	$2436.24
NET INCREASE OR DECREASE FOR OPERATION	$ 56.72

Food costs Divide 1461.94 by 2492.92 = 58.6 percent
Labor costs Divide 947.47 by 2492.96 = 38.0 percent
Other costs Divide 26.83 by 2492.96 = 1.0 percent

Compare with recommended percentages.

NOTE—The form may be extended for multiple school lunch units in a district.

ACTIVITY SHEET 9
TOPIC 3

RECIPE COST SHEET

Date ____________________

Product Cheese-Meat Loaf

Source of recipe USDA Recipes D-37

Size of serving 1 slice—¾ inch thick

Number of portions 100

Cost per serving
All foods purchased ________
Using DD foods ________

Type A Standards Met Per Serving

Protein-rich food ______
Fruit and vegetable ______
Butter ______
Bread ______
Milk ______
Vitamin A (check) ______
Vitamin C (check) ______

Ingredients	Quantity Used	Price Per Purchase Unit	Total Cost	Cost If DD Foods Are Used
Bread slices	1 lb.	$ .175		
Milk	1½ qts.	.28	*	
Chopped onion	¾ lb.	.08	**	
Chopped celery	¾ lb.	.16	**	
Ground beef	10 lbs.	.55		
Salt	¼ c.		$ .01	
Worcestershire sauce	¼ c.			
Chopped parsley	2 oz. (2 bunches)	.02		
Eggs—fresh	25	.60 per doz.		
or				
Eggs—dried	12½ oz.	.063		
Cheese	2 lbs.	.45		
TOTAL				

* Cost considering reimbursement of 4¢ per half pint
** Add 10 percent for preparation waste

ACTIVITY SHEET 10
TOPIC 3

Sample Menu Cost Analysis Sheet for 100 Servings

Total student meals	85
Total adult meals	15
	100

Menu	Size Serving	Allowable Servings Per Unit	Quantity Used for 100	Cost Per Unit	Cost Per 100 Servings	
					Including Value USDA Donated Food	Excluding Value DD Food
Cheese-meat loaf D-37	1 slice (¾" thick—2½ oz.)	Calculate cost	USDA recipe D-37	Ground beef $ .50 lb.	$7.61	$5.12
Buttered Mashed Potatoes	½ c.	3.45 per lb.	29 lb.	.06 lb.	2.26	1.86
Bread	1 slice	28 slices (2 lb. loaf)	3¾ loaves	.175 lb.	1.09	.16 (Baked at school)
Butter	2 tsp.	48 per lb.	2¼ lb.	.70 lb.	1.58	.00
Cole slaw (C)	¼ c.	19 per lb.	5½ lb.	.06 lb.	.71	.71
Peaches (A) (canned)	½ c.	24 per No. 10 can	4¼ cans	1.00 (No. 10 can)	4.25	.00
Oatmeal cookie	1 cookie	Calculate cost	USDA recipe C-18		1.05	.67
Milk	½ pt.	1	100	.06	6.00	6.00
				Total	$24.55	$14.52
					14.52	
					$10.03	Saving from use of donated foods per 100 meals

Determine percent food, labor, and other costs from your annual statement of operational costs.

• If lunch price to children is	$ .30
reimbursement	.09
Yearly board appropriation for school lunch manager's salary is $5,000. 180 school days divided by average participation (600 meals)	.05
Total Income	$ .44
• If food cost is 55% $ .44 x 55%	$ .2420
• If labor cost is 40%	.1760
• If other cost is 5%	.0220
	$ .4400

Type A standards met per meal
- Protein-rich food
- Fruit and vegetable
- Butter
- Bread
- Milk
- Vitamin A
- Vitamin C

Cost per 100 servings	—$24.55
Using DD foods	— 14.52

Sanitation, Safety, and Storage

To safeguard the health of school children, it is important not only that schools serve nutritious lunches but that they know how to prepare, serve, and store food in the safest and most sanitary manner. Continuous training of all personnel is essential for safe food service.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding Federal, State, and local sanitary codes	Study items included in local, State, and Federal sanitary codes issued by health departments regulating food service establishments. Arrange talk by county or city sanitarian to help interpret sanitation standards.
Understanding the health and personal hygiene requirements for school lunch workers	Discuss importance of periodic health examination and immunization tests for adult and student workers. Interpret school health and sick leave policies. Report to school nurse if any suspicion of communicable disease, colds, or other illnesses, sores, wounds, or lesions. Persons who are not well should not be allowed to work around food. Report to nurse if there is an accident while working. Notify local health authorities if a worker is suspected of being a carrier of communicable disease. Use members of the group as models to demonstrate good and poor grooming and suitable uniforms. Discuss the need for personal cleanliness and good grooming for food service personnel.
Recognizing the responsibility of adult and student workers for sanitary work habits	Use films to show transmission of bacteria from workers to food. Refer to the school lunch bibliography, page 24. Discuss or demonstrate correct and incorrect work habits such as the following: Handwashing before work and after using handkerchief or toilet Proper use of towels Correct handling of glasses and cups by bases, tableware by handles, use of proper utensils for serving instead of fingering foods Why smoking around food is undesirable Interpret the outline Food Safety and Sanitation Practices for Personnel in your school lunch handbook if available.
Knowing good housekeeping practices	Explain your posted cleaning schedules, daily and weekly, for each worker. Explain the need for the following:

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Cleaning work surfaces and equipment immediately after use Knowing where small equipment and cutlery is stored and importance of putting tools back in proper place Cleaning up spilled food immediately Removing garbage and other waste cans following the lunch period and proper sanitizing of these containers Discuss safe methods of handling foods. Refrigerate protein-rich and creamed foods promptly. Cool foods quickly. Refrigerate in shallow pans to assure rapid cooling. Keep leftover and other foods covered between periods of use. Do not leave exposed at any time. Refer to PA-403, *Food Storage Guide for Schools and Institutions.* Train personnel in the use of insecticides and other effective measures for protection from flies, roaches, rodents, and vermin. Consult your local health department for approved pesticides. Label insecticides "Poison" and store away from food. Be sure all food is refrigerated or well covered before using insecticides. Thoroughly cleanse surfaces following use of spray. Evaluate storage practices by completing Activity Sheet 1.
Understanding the need for purchasing safe foods	Discuss State law concerning milk handling and pasteurization. Emphasize refrigeration of milk until served. Discuss the need to: Purchase inspected meats. Display the stamp indicating inspection Buy seafood from sources approved by the Public Health Service Avoid purchasing exposed food, such as unwrapped bread and pastry Check on deliveries of fresh, frozen, canned, and staple foods Display defective cans and packaged foods. Emphasize proper handling of frozen foods. These may not be thawed and refrozen.
Learning the value of safety equipment	Discuss need, value, and proper placement of a fire extinguisher, fire blanket, and first aid kit. Invite the local fire inspector to give a talk and to demonstrate use of the extinguisher.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Understanding how to prevent cuts, burns, and accidents	Demonstrate storage of knives with blades protected.
	Demonstrate the proper type of cutlery and use for work to be done.
	Show the safe method of cutting, dicing, and mincing.
	Discuss the need to do the following:
	Collect sharp tools on a tray and wash immediately (not soak in the pot sink)
	Discard defective dishes, utensils, and opened tins
	Discuss and demonstrate how to avoid burns by:
	Using dry pot holders rather than a damp towel or an apron
	Using an oven peel, insulated gloves, or proper tool to remove pans from oven
	Filling kettle only to a safe level
	Stirring with long-handled spoons or paddles
	Avoiding fat fires. Do not fill fat container too full. If fat catches on fire, cover immediately. Use salt on a stove fire.
	Demonstrate use of steam equipment, mixer, peeler, and slicer.
	Discuss precautions for preventing accidents.
	See topic 4—Sanitation, Safety in Equipment.

Evaluation

Develop with class a check sheet to use in your own school lunch program. Include points under the following:

- Understanding your local sanitary code
- Purchasing safe food
- Proper storage
- Health of workers
- Good work habits
- Careful housekeeping methods
- Safe dishwashing
- Use and care of equipment

Evaluate your storage practices by completing Activity Sheet 11.

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Activity Sheet 11
Topic 3

STORAGE CHECKLIST

DRY STORAGE

The Space

_______Is it well ventilated?
_______Is it cool and dry?
_______Is it free from insects and rodents?
_______Is it clean, orderly, and well managed?
_______Is the room free of pipes, water heaters, etc.?

The Equipment

_______Are strong shelves and floor racks provided?
_______Are metal cans provided for storage of flour, rice, beans, sugar, and meal on casters or mobile units, rodent and bug free?
_______Is a scale available for checking weights of foods delivered?
_______Is a thermometer provided?

The Arrangement and Organization

_______Are packages dated when received?
_______Are oldest stocks placed out front and used first?
_______Are foods stored off the floor in areas of good air circulation?
_______Are cleaning supplies, insecticides, brooms, mops, stored in a special area away from the food storage room?
_______Are foods placed so that air can circulate around them for drying, coolness, and cleanliness?
_______Are foods placed away from the wall?

The Management

_______Is an inventory maintained? (For purchased foods and USDA donated foods)
_______Are foods used on FIFO basis? (First In, First Out)
_______Are foods weighed and/or checked upon receipt?
_______Is storeroom cleaned and straightened regularly?
_______Is inventory used in planning menus and buying?
_______Is storeroom sanitation, management, and organization assigned to one person?
_______Is multipurpose equipment used when available and practical?
_______Do work schedules and work habits include organization for one trip to storage room?

REFRIGERATOR STORAGE

The cooler or refrigerator

- ________Is temperature maintained at 35°-45° F.?
- ________Is refrigerator located near the point of greatest use?
- ________If more than one refrigerator is available—
    - ________Is one located near serving counter?
    - ________Is one located near vegetable and cooking unit?
    - ________Is one located near bake unit?
- ________Is the refrigerator space adequate?
- ________Is the refrigerator level?
- ________Is the refrigerator cleaned regularly?
- ________Is the refrigerator maintained according to manufacturer's instructions?

Topic 4

USING AND CARING FOR EQUIPMENT

Efficient use and care of equipment is essential to good management. For this reason, it is important to teach workers the safe and proper methods of using their equipment. Plans should be made for continuous checking to be sure that directions are clearly understood and carefully followed. In teaching proper use of equipment, the significance of instructions prepared by the manufacturer is of utmost importance. Viewing films and demonstrations showing the use of equipment and actual practice in handling equipment supplement the instruction sheets and give the learner confidence that the correct techniques are being used.

Certain pieces of equipment may be used for more than one preparation process. For example, the mixer will reconstitute dried milk and dried eggs, mix cake, meat loaf, and mash potatoes. Workers should develop skills in obtaining maximum usage from each equipment item and be encouraged to try new uses. They should become familiar with the capacity of each piece and clearly understand its operating principles in order to avoid overloading or using the item for purposes which would cause damage or produce substandard products. Awareness of the cash value of each equipment item and the ways in which it may be used to simplify work and reduce time and energy requirements help to foster wise use and care of each piece of equipment.

Several major considerations in the use and care of equipment are suggested in this section. The person responsible for training may wish to expand some of the suggested activities and adapt or add others to meet particular needs of the situation.

The following units will review some opportunities to achieve desired learnings in relation to:

Use and Care of Mechanical Equipment
Use and Care of Small Equipment
Equipment Sanitation and Safety
Making Tools Work for You

Use and Care of Mechanical Equipment

Specific directions for the use and care of mechanical equipment are necessary if the food service is to obtain maximum usage from each item and the worker is to develop skill in its operation. Manufacturers' instruction manuals should be available to the workers and concise operating instructions posted at each unit. These general suggestions may be applied to specific pieces of equipment.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Developing ability to operate mechanical equipment such as:	Display and discuss a variety of instruction manuals for equipment used by the workers.
Mixer Slicer Steam kettle Steamer Can opener Mixer attachments Vegetable peeler Chopper	Demonstrate correct operating procedure, both with and without use of a product. Have worker repeat mechanical operating steps, then make product demonstrated. Show correct cleaning procedure. Have worker clean unit under observation.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Invite equipment salesman to talk with group about use and care of specific pieces of equipment. Using role playing, have experienced worker demonstrate teaching operation of machine to new employees. Perform a specific job with and without mechanical equipment. Compare time needed for each operation.
Understanding some mechanical principles involved in equipment operation	Discuss and observe mechanical principles necessary to know when operating certain pieces of equipment, such as the following: Abrasive action of peeler Effect of pressure in steam units Thermostat control for oven temperatures Rotation pattern of mixer beater Intake and exhaust of air by refrigerator compressor Purpose of heating element under tank of dishwasher Chopping cycle of food chopper
Using safety precautions to avoid accidents	Study safety factors built into equipment. Demonstrate how accidents are prevented during equipment operation. Explain policy of school regarding accident reports.
Understanding the variety of uses for the following pieces of equipment: Mixer Slicer Steam kettle Steamer Chopper Vegetable peeler	List different types of products which may be made in the same equipment unit. Demonstrate as many of the above products as feasible. Plan together a time schedule for using the mixer and slicer two or more times in the preparation of one meal.
Determining ways to detect and report operating defects	Discuss ways of determining that equipment is not working properly through unusual noises, smell, or performance. Explain procedure for reporting deviations from normal performance.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Using equipment attachments	Display attachments and explain when used. Demonstrate how to attach and use each attachment. Discuss time saved in using attachments. Record time required to mix cake with and without mixer. Make coleslaw with and without shredder.
Using correct cleaning methods	Study equipment operating manuals and demonstrate correct cleaning procedures. Arrange for individual workers to practice cleaning specific pieces of equipment. Discuss the need for planning daily, weekly, and monthly cleaning schedules.
Appreciating how records of maintenance contribute to efficient operation of equipment	Study maintenance directions in operating manuals for equipment. Display inventory records being maintained to show guaranty, name of service agent, history of repairs and parts replacements, and other pertinent information. Discuss the use of these records to save time.

Use and Care of Small Equipment

Procedures used in teaching the use and care of small equipment are similar to those used for mechanical equipment. Emphasis should be placed on choosing the correct utensil for the job and developing skill in its usage.

Developing ability to select correct utensil for the job to be done	Display and demonstrate use of items of small equipment used in large quantity food preparation that are not commonly found in the home, i.e., wire whips, bowl scrapers, china cap, bakers' peel, bakers' scales, French knife, paddles. Show film "Use of the French Knife." Invite cutlery salesman to display types of knives; demonstrate correct use of each. Discuss criteria for selecting cutlery of quality. Plan to visit restaurant supply store to observe various types of equipment on market. Through role playing, demonstrate way in which new worker may be taught to choose correct utensil for specific jobs.
Recognizing that standard measuring utensils save time and money in preparation and serving of food	Show how to use scales for measuring ingredients for a specific recipe.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Demonstrate use of such measuring utensils as ice cream scoops, ladles, quart and gallon containers. Through group discussion, list specific ways in which standard measures assure accuracy and save time. Show importance of using measuring utensils in serving to obtain standard portions.
Adopting proper cleaning and storage methods to retain efficiency of utensils and prolong their usefulness	Show how knife racks retain cutting edge on knives. Show the deterioration which results from soaking wooden items. Review with workers the cost of small equipment items to impress upon them the importance of proper care. Display aluminum items which have become bent and pitted due to poor care in storage or improper cleaning. Review instruction leaflets on care of stainless steel.
Using portable equipment to save time and energy	List with group members some of the ways in which dollies, platform trucks, and tray carts may be used. Demonstrate the use of carts and tray racks for transporting many small items such as raw ingredients for baking, utensils between clean and soiled dish centers, desserts, and salads set up for serving. Demonstrate the use of dollies for moving bowls and other equipment between points of use.
Assembling equipment at point of usage to improve efficiency	Have class list utensils needed for serving a specific menu and plan their location on the counter for greatest convenience in use. Demonstrate how to assemble utensils in preparation for making a specified baked product. Discuss importance of storing duplicate small utensils at various work areas when these utensils will be used in more than one everyday task.
Giving metals correct care	Discuss manufacturer's directions for care of stainless steel, aluminum, and other metals commonly used in kitchen equipment. Display utensils which have not had correct care, reviewing causes for darkened, scratched, or pitted metals.
Understanding of certain scientific principles which are applied in using small equipment	Place equal amounts of water in aluminum, stainless steel, and enamel utensils of the same size. Use thermometer to determine temperature of water and compare time taken for contents of each to reach 212° when the same amount of heat is applied. This will illustrate heat conductivity of different metals.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Pour equal amounts of boiling water or broth in the same type and size pans. Agitate contents of one frequently to show effect of motion on distribution of heat. Use thermometer to check rate of cooling in each over a definite period of time. Repeat above experiment by placing containers in cold water to illustrate best procedure for rapid cooling of liquid foods.

Equipment Sanitation and Safety

Continuous training in the correct use and maintenance of equipment is necessary to produce food which is safe for human consumption. Careful instruction and supervision of workers help to avoid careless handling habits which are the most frequent causes of accidents and breakdown of equipment. Specialists in sanitation and safety are available in most communities to serve as consultants and help with training.

Information concerning safe handling of equipment and foodstuffs should be readily available to workers at all times. Instructions which are easily followed, posted on bulletin boards or near the piece of equipment being operated, assist the worker in its correct usage. What to do in case of emergency should also be conspicuously posted and frequently discussed with employees.

Understanding the importance of regular scheduling for cleaning and maintenance	Have class list special problems resulting from lack of regular schedules for care and maintenance of equipment. Discuss the undesirable results which may occur because of this lack of planning. List with group members health hazards which may be caused by inadequate cleaning of equipment. Cite three occasions when time was wasted because needed repairs were not made promptly. Through discussion, estimate total amount of time that might have been saved. Develop with group members daily and weekly cleaning schedules using instruction manuals for care of specific pieces of equipment.
Keeping equipment items clean and safe to use Dishwasher Peeler Slicer Range and ovens Mixer Chopper	Demonstrate proper cleaning of each item listed. Have class members practice disassembling and cleaning mixer, slicer, peeler, and chopper and reassembling the equipment ready for use. Display agar plates showing results of swab tests made from clean and soiled plates, tabletops, silverware, and towels. Discuss ways to use instruction manuals.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Invite equipment representative to discuss sanitation and safety in equipment care. Show available films on care of equipment.
Observing precautions in safe handling of electrical equipment	Invite local electrician or fireman to discuss safe handling of electrical equipment. Have class list hazards that exist when electrical equipment is carelessly used. Point out specific safeguards included in construction of electrical equipment such as insulation, circuit breakers, motor housing, knife guard, and safety switch. Explain reasons for keeping floor dry and keeping electrical outlets separated from water supply.
Using correct procedures in prevention and care of accidents	Invite school nurse to talk to group on first aid measures which may be needed in the kitchen. Demonstrate safe techniques for removing lids from utensils filled with boiling materials. Invite administrator to explain school policy for reporting and dealing with accidents. Guide class on tour of kitchen to locate fire fighting equipment. Practice using each type.
Selecting tools which help to avoid accidents	Display the following items and discuss safety features in construction which help to avoid accidents: Stepladders and stools Trucks and dollies for moving heavy items Floor protection Long-handled paddles and ladles for deep pots Knife racks Bakers' peel Asbestos potholders Tongs Utensils with secure handles
Placing equipment to avoid accidents	Illustrate the hazards in poor placement of equipment resulting in cross traffic by a diagram showing lines of travel within a kitchen. Show how relocation of equipment will eliminate cross traffic and shorten lines of travel. Conduct tour of kitchen to point out items which must be moved to free traffic aisles.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Discuss need for planning passage aisles to be used for traffic. Explain why certain areas should not be used, i.e., space between range and oven and work tables, lane between preparation area and serving counter.

Discuss importance of having definite place for each piece of equipment, large or small.

Have class list hazards resulting when supplies are not put in their assigned places immediately after using.

Ask group members to indicate areas where good lighting is especially important.

Discuss dry and refrigerated storage area arrangement.

Making Tools Work for You

The efficiency of tools depends upon the skill of the operator in using them and the condition in which they are maintained. Manufacturers work to perfect designs which are easily handled and reduce labor, and also to prepare instructions to furnish with the equipment. School lunch workers need direction in correct use of equipment and practice to develop skills in order to obtain the greatest performance value from each item. Equipment which is improperly used or never used because of lack of training in its correct operation is a poor investment.

Identifying items of equipment that reduce labor

Have class list specific pieces of labor-saving equipment used in large quantity food preparation. Display other items with which the class members are not familiar.

Discuss with group specific features of each item which are planned to save labor.

Use kitchen as laboratory to have class teams prepare equal amounts of the same products with and without labor-saving equipment. Compare time and labor used by each team for the following activities:

Mix meat loaf in mixer and by hand.
Cook rice in oven and on top of stove.
Measure ingredients for muffins on scales and with conventional measuring utensils.
Slice cheese on slicer and with slicing knife.
Use peeler and hand pare potatoes.
Chop cabbage on mixer attachment and by hand.
Cook potatoes in steamer and on top of range.
Reconstitute dried eggs in mixer and with hand beater.

Discuss other preparation that may be done while mechanical equipment is working, i.e., cleaning vegetables while meat loaf is mixing.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Determining multiple uses of some labor-saving equipment	List with class the variety of processes which certain equipment pieces perform. Use instruction manual. Discuss advantages of adaptor and two sizes of bowls for mixer. Plan with group a work schedule for a specific menu in which the mixer, slicer, and steam kettle are used more than once.
Appreciating the use of mobile equipment as a means of increasing productivity and reducing fatigue	Illustrate with a diagram the steps taken in preparing meat loaf when a cart is used. Compare with diagram showing same product made without the use of a cart. Have class list the ways in which portable bins consume less time and labor than permanently installed bins. Place frequently used small equipment and staple supplies on a cart. Show how this can save time and steps. Discuss the saving in energy and time resulting from the placement of mixer and slicer on portable bases. Have class consider the ways in which trucks used for moving case goods and other heavy items prevent fatigue and strain. Through group discussion, list activities connected with serving in which a cart may be used to save steps.

Evaluation

Have workers keep record of minutes saved in using labor-saving equipment in routine tasks. Discuss results in group meetings. Assign a class participant to train a new employee in the use and care of a specific piece of equipment. Observe procedure for correct techniques and instructions which help the new worker understand underlying principles of the operation.

Make chart and have workers record the number of times certain items of equipment are used daily for processes which were not used prior to the training period.

Request each worker to make a list of techniques learned which she finds useful in day-to-day work performance and report at next meeting of the group.

Discuss with workers at follow-up meeting possible new ways to use equipment not discussed in the training program but suggested by discussions. Give workers opportunities to test these ideas and incorporate them in daily practices if they seem worthwhile.

Have workers suggest and experiment with possible rearrangement of large and small equipment to increase efficiency and safety. Measure steps and/or time saved as a result of these changes and report at the next meeting.

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Topic 5

PREPARING AND SERVING THE SCHOOL LUNCH

Children are willing to participate in school lunch programs which provide high quality food served in quantities which satisfy growing children's appetites. To meet this standard, all school lunch personnel must have a working knowledge of the principles and techniques of quantity food preparation and serving. This knowledge, together with an understanding of the contribution which Type A lunches make to the health and well-being of children, should be gained early in the employment period. The following units are suggested for use in training conferences. Choose those which meet the needs of the group to be trained.

Quantity Food Preparation

Preparing Food for Serving

In developing these units, make use of the information which is included under "Improving Management Practices," Topic 3, and "Using and Caring for Equipment," Topic 4, before planning the lesson to be taught.

Quantity Food Preparation

The preparation of quality food for Type A lunches involves both art and science. It is an art because it requires skill in preserving the rich color and shape of the food; skill in combining colors, shapes, and textures on the plate. It is a science because it requires a scientific approach to preparing and cooking the food to conserve nutrients, the knowledge of the why's and wherefore's of cookery processes to prevent shrinkage of meat, lumpiness or pastiness in sauces and gravies and loss of flavor in all foods. Preparing quality food includes the selection and use of standardized recipes, selection and use of equipment, knowledge of weighing and measuring procedures, standard products, and work schedules.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Gaining an understanding of the objectives of good food preparation	Through class discussion, develop objectives of good food preparation. List on chalkboard.
	Conserve nutritive value as follows:
	Buy good quality food.
	Store under proper conditions for as short a time as possible.
	Prepare carefully.
	Prepare and cook vegetables as near serving time as possible.
	Use proper cooking methods.
	Stagger cooking times. Prepare in small batches so that the product will not have to be held for a long period of time or reheated.
	Avoid leftovers, but, if there are leftover foods, refrigerate them promptly and use as soon as possible.
	Improve digestibility.
	Cooking some foods brings about chemical changes similar to digestion.

SUGGESTED CONTENT AND ACTIVITIES

Cooking more often results in a change in form. For example, egg white changes from semifluid to gel state.

Develop and enhance flavor.

Prepare food as close to serving time as possible.

Use staggered cooking times for long service periods.

Cook in as little water as possible.

Cook as short a time as possible.

Increase attractiveness of fruits and vegetables.

Color

White—Cook short time, have pieces uniform. Prepare fruits that discolor easily as near serving time as possible and dip in acid fruit juice to prevent discoloration.

Red—Avoid peeling or exposing large surfaces to water. Cook in steamer in perforated baskets. Cook in weak acid or add acid sauce when holding is necessary.

Yellow—Cut in uniform pieces. Cook in steamer in perforated baskets. Avoid overcooking or holding too long on serving counter.

Green—Cook in boiling salted water for as short a time as possible. Use staggered cookery for long service periods. Avoid reheating.

Form and Texture

Cook for as short a period as possible—until "just done," i.e., pieces or slices are easily recognized; food is softened (tender) as in meats, some fruits and vegetables, or hardened as in pastries, batters, doughs; cut foods into recognizable but easily handled sizes; prepare as near serving time as possible; "crisp up" finger foods, etc.

Make foods safe.

Buy safe foods—inspected meats, pasteurized milk.

Store foods at correct temperature.

Follow recommended times and temperatures for cooking. A temperature of 185 degrees F. for 15 minutes or 140 degrees F. for 1 hour is needed to destroy injurious organisms in low-acid foods such as milk, beans, and meat; slightly lower temperatures are safe for high-acid products such as tomatoes, apples, and fruit juices. But, remember, *all portions of the food must reach those temperatures and be maintained there for the designated time to insure safety.*

Serve and keep hot foods *hot* and *cold* foods *cold.*

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Avoid leftovers—but, if there are some, *hot* foods *must be cooled rapidly and refrigerated promptly*. Cream sauces, cream pies, etc. *must be kept refrigerated.* Use leftovers as soon as possible. Keep frozen foods frozen until ready for use. Never thaw and refreeze. Thaw in refrigerator, not at room temperature.
Appreciating the value of the preliminary processes in preparing food	Preparing food for cooking involves specific processes. One or more of the following steps are preliminary to final processing: Sorting for condition, size, washing, and foreign material Paring, either by hand or by mechanical means, or shelling, as in the preparation of legumes Cutting, slicing, dicing, grating, or grinding by hand or by mechanical means Soaking, when necessary, for some dried foods, such as fruits, vegetables, and fish Crisping and chilling Point out that the thoroughness and care with which these preliminary preparations are done will affect greatly the final acceptability of the food and the yield and cost of the final product.
Developing skill in measuring and weighing	Accuracy in measuring is an important factor in producing a good consistent standard product. For accuracy, you need the right kinds of measures. After choosing the right measure for the job, skill in using the measure correctly must be developed. Demonstrate the correct use of liquid and dry measures, measuring spoons. Stress accuracy in measuring (1) flour, (2) sugar, (3) solid fats, (4) liquids, (5) dried whole egg solids. Divide participants into groups and have them practice measuring. Refer to Card A-3, PA-271. Point up differences which may result when products are measured rather than weighed. Stress that weighing is more accurate than measuring and once the workers have learned to use scales, they will find them valuable for many jobs. Demonstrate the correct way to use balance scales. Refer to *School Lunch Journal,* May 1959, "Here's How To Use Scales in Your Lunchroom."
Developing an understanding of principles of cookery	The cookery processes employed in institution cookery include all those used in the home. In either case, the quality characteristics of the product determine the method of cookery chosen. The methods are classified according to the cooking medium. Air (dry heat)—baking, roasting

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Water (moist heat)—boiling, simmering, stewing, poaching Steam—steamers, steam-jacketed kettles, pressure steamers, "waterless" cookers Fat—pan frying, deep fat frying Heat transferred directly from the container—pan broiling, "baking" griddle cakes and waffles Methods combining one or more of the above—braising, fricasseeing
	List on chalkboard in jumbled order various foods that are generally cooked by one or more of the methods outlined above. Include a few "catch" items such as meat loaf, shepherd's pie, etc. Have participants list each food under appropriate method of cookery. Review answers and point up reasons for placement.
Application of the principles of cookery to various foods	Identify desirable cooking standards. Consider the significant principles involved in preparing and cooking each of the foods listed on the following chart. Judge each product for standards achieved.

COOKERY STANDARDS FOR SELECTED FOODS

FOOD GROUP	DESIRABLE COOKING STANDARDS	WAYS TO IMPLEMENT STANDARDS
VEGETABLES Refer to Section J of PA-271, Cards J-2, J-3, J-5, for general preparation directions. Give particular attention to cooking specific groups of vegetables, such as green, yellow, red, white, strong flavored.	FRESH VEGETABLES—tender but firm, color and flavor characteristic of product, digestible, and appetizing	Cook for retention of original color and shape. Cook in small amount of water to retain nutritive value.
	FROZEN VEGETABLES—same as above. See PA-271, Cards J-4 and J-6.	Same as above
	CANNED VEGETABLES—same as above. See PA-271, Card J-1.	Heat for retention of original color and shape. Heat in small amount of liquid to retain nutritive value. Heat only long enough to bring to serving temperature.
	SALADS—attractive, appealing, crisp; contrasts of texture and temperature. (See Activity Sheet 2, Topic 5, for a suggested scorecard for salads.)	Wash to make safe for eating. Dry to help crisp. Prepare to keep as much of original form of ingredients as possible. Plan for contrasts of color and flavor combinations. Chill to crisp and retain nutrients. Toss lightly to mix. Arrange attractively and simply.
BREADS Refer to Section B of PA-271 for specific directions for baking breads.	Symmetrical and well-shaped; uniform size. Uniformly golden brown color. Smooth, tender crust. Good volume. Texture or grain free from large air bubbles; uniform color. Moist crumb. Fresh, tempting fragrance. Well-baked flavor, having a nutlike or wheaty taste. (See Activity Sheet 3, Topic 5, for a suggested scorecard for baking powder biscuits.)	Use tested formulas or standardized recipes. Use good quality ingredients. Weigh or measure ingredients accurately. Know and use the specific mixing techniques recommended in recipes. Maintain 85° F. rising temperature. Scale or measure the prepared product into baking pans.

COOKERY STANDARDS FOR SELECTED FOODS

FOOD GROUP	DESIRABLE COOKING STANDARDS	WAYS TO IMPLEMENT STANDARDS
PROTEIN-RICH FOODS Meat, poultry, fish, eggs, cheese, and dry beans and peas. Refer to Section D of PA-271, Cards D-1 to D-8, for general preparation directions.	MEAT—tender, juicy, palatable, and "safe" with minimum of shrinkage, etc. (See Activity Sheet 1 for a suggested scorecard for meat loaf.)	Cook at low temperatures. Use method indicated by tenderness of meat, i.e., *dry heat* roasting, baking, broiling, pan broiling for tender cuts; *moist heat*—braising, stewing, simmering for less tender cuts.
	POULTRY—juicy, tender, and evenly done to the bone	Cook at low temperatures. Use method indicated by age and fatness of bird, i.e., *dry heat*—for young tender birds (broilers, fryers, roasters); *moist heat*—for older birds (large roasters, stewers, etc.).
	FISH—juicy, flavorful, tender (flaky), and well done	Cook at moderate temperature and rapidly enough to retain juices and moisture but slowly enough to insure thorough cooking.
	SHELL EGGS—tender and evenly cooked. (See West and Wood, *Food Service in Institutions,* pp. 123-127 for suggested standards.)	Cook below boiling temperature to avoid hardening or toughening of white and dull color and rubbery texture in yolk.
	DRIED WHOLE EGGS—tender and thoroughly cooked so that they are safe to eat. Use in products recommended for dried eggs (see Card A-6, PA-271).	Cook at temperatures recommended so that product is thoroughly cooked. In general, products in which dried eggs are incorporated should be baked—breads, long-cooked casseroles, and baked desserts.
	CHEESE—smooth, flavorful, without stringiness and curdling	Cook at low temperature.
	DRY BEANS AND PEAS—tender but firm, good texture, and easily digested	Cook for a relatively long time in gently boiling water. Cook until just tender. Bake slowly at low temperature.
CEREAL PRODUCTS Refer to Section B of PA-271, Cards 6 and 12, for general preparation directions.	Soft, flavor characteristic of product but without raw starch flavor	Cook quickly in large amount of boiling salted water until soft but holds shape and has characteristic flavor of product.
	MACARONI, NOODLES, AND SPAGHETTI—tender, yet firm and chewy-textured. Break easily and cleanly when done.	Cook as near to serving time as possible; cook in small quantities. Do not overcook. Slightly undercook when to be used for steam table servings or in combination dishes that require further cooking.
	RICE—fluffy, separate, tender, whole grains	Cook in a small amount of water at low temperature until water is absorbed. Follow cooking directions for type of rice to be used for best results. Use shallow steam table pans to eliminate packing. Fluff rice with a fork or spatula when pouring cooked rice into steam table pans to separate grains. Cook no more than 100 portions in one pan.

COOKERY STANDARDS FOR SELECTED FOODS

FOOD GROUP	DESIRABLE COOKING STANDARDS	WAYS TO IMPLEMENT STANDARDS
TYPICAL DESSERTS Refer to Section C of PA-271 for general preparation directions.	CAKES AND COOKIES—Refer to West and Wood, *Food Service in Institutions,* p. 25, for suggested standards and scorecard.	Use standardized recipes. Purchase good quality ingredients. Use proper tools. Follow recipe directions accurately. Assemble all necessary utensils, equipment, and ingredients before beginning preparation. Preheat oven to desired temperature. Use standard measuring and weighing equipment and weigh or measure accurately. Measure or scale mixture into pans. Place pans in oven so that they do not touch each other or sides of oven. Time accurately and remove from oven as soon as done. Cool in pans for 15 minutes.
	PASTRIES—judge for appearance (lightly and evenly browned), texture (rich, flaky crust). Note: in fruit pies, filling should be moist, but fruit should hold its shape. In cream pies, filling should be stiff enough to stand up, but bend slightly under topping when served.	Use standardized recipe. Use proper ingredients in correct amounts. Mix and handle dough lightly. Avoid overhandling. Store cream pies in refrigerator.
	EGG-MILK DESSERTS—see West and Wood, *Food Service in Institutions,* pp. 123-127 and 137, for suggested standards for egg and milk products.	Follow basic principles of protein cookery.
	GELATIN DESSERTS—judge the finished product for appearance (clear-cut edges), texture (firm and delicate but not rubbery), and flavor (characteristic of ingredients).	Use canned fruit juice for liquid. Cool at room temperature for better consistency. Add fruits or other ingredients when gelatin is consistency of an unbeaten egg white. Whip when it begins to jell and add other ingredients such as beaten egg white before placing in refrigerator. Remember, use canned or cooked pineapple. Fresh and frozen pineapple contains an enzyme which will keep gelatin from solidifying.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Developing an understanding and appreciation of the value of standardized recipes

Ask individuals to give their definition of a standardized recipe. Discuss answers and point out that a standardized recipe is one which has been carefully tested for quality and yield.

Using PA-271—*Recipes, Type A School Lunches,* become familiar with recipes that have been tested to provide 100 portions of definite size and which contribute a predetermined amount to the Type A lunch requirements.

Examine commercial quantity recipes. Point out that these are tested to provide a given number of portions of definite size. The individual user must determine the contribution to the Type A lunch requirements. Supplementary information on Activity Sheet 4, Topic 5, has been prepared for use in evaluating the contributions of a commercial recipe.

Using the *Food Buying Guide,* PA-270, and Activity Sheet 5, Topic 5, calculate the amount of protein-rich foods that may be counted toward meeting Type A requirements.

Using the *Food Buying Guide,* PA-270, and Activity Sheet 6, Topic 5, calculate the contribution in either ½- or ¼-cup portions for the fruit/vegetable part of the Type A pattern.

Discuss reasons for using standardized recipes such as saving time and money, increasing acceptability of food served, establishing standards of quality, preparing a good product every time, obtaining same yield each time, controlling food costs. List on chalkboard.

Using standardized recipes

How to use standardized recipes.

> Make recipes easily accessible through location in kitchen and organization in file box or other container.
>
> Using Activity Sheet 7, Topic 5, pretest knowledge of individuals to determine their understanding of terms and abbreviations. Review and briefly discuss correct answers. Have participants correct own papers.

For your convenience, the correct answers are listed below.

Key to Activity Sheet 7

1. *d;* 2. *d;* 3. *b;* 4. *c;* 5. *a;* 6. *c;* 7. *d;* 8. *b;* 9. *a;* 10. *c;* 11. *d;* 12. *a;* 13. *c;* 14. *b;* 15. *c;* 16. *d;* 17. *d;* 18. *b;* 19. *d;* 20. *c;* 21. A. *d;* B. *a;* C. *d;* D. *c;* E. *b;* F. *d;* G. *c;* H *a*. [redacted]

Using Activity Sheet 8, Topic 5, and recipes in PA-271, review and discuss the information given in a standardized recipe and the reasons for using them.

Stress the importance of reading the complete recipe and understanding terms and abbreviations.

Study Card A-2, PA-271, for instructions on "How to Adjust the Recipes." Demonstrate how to adjust recipe using chalkboard and

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Activity Sheet 9, Topic 5—a completed worksheet for adjusting the recipe for cheese-potato casserole, Card D-20. Point out that the number of servings required and equipment available must be considered when adjusting recipes. Determine whether available equipment is large enough to hold the increased amount. When more than 200 servings are needed, it is wise to prepare the total amount needed in several lots. This is especially important for breads, cakes, and similar products, but a product such as cheese-potato casserole can be made in slightly larger batches without affecting quality. Distribute a worksheet, similar to Activity Sheet 9, Topic 5, and have class members adjust one of the PA-271 recipes for the number served in their own school.
Determining foods and the amounts of foods needed to prepare the recipe	Using Card D-20, PA-271, have participants tell ingredients needed to make cheese-potato casserole. List on chalkboard. Discuss briefly those foods which are likely to be in storeroom and refrigerator, those which will have to be purchased. Are any school lunch specials included? What USDA donated foods are used? Using PA-270, demonstrate how to determine "As Purchased" (A.P.) amounts of ingredients needed when *cooked* amounts are called for in recipes. Point out that the amounts called for in the recipe file, PA-271, are "ready-to-use" amounts and must be converted to A.P. before the market order can be made. Give out Activity Sheets 10, and 11, Topic 5, and have participants complete the exercises.
Determining the tools, utensils, and ingredients needed	Have participants determine utensils, tools, and ingredients needed to prepare cheese-potato casserole for 100 people (D-20). The instructor might have an exhibit ready of all the utensils, tools, and ingredients needed. Compare it with the list the class prepared. Point up the value of thinking through the task of preparation. This will eliminate (1) unnecessary trips to the storeroom, (2) wasted motions, (3) exasperation resulting from not having the needed tool, utensil, or ingredients.
Developing an appreciation of the importance of a work plan	Discuss the reasons for making a work plan. List on chalkboard. Develop a work plan with the participants' help. Consider the following points. List all jobs to be done in proper sequence. Divide them among the various work units. Assign each person responsibility for completing specific jobs.

DESIRED LEARNINGS

SUGGESTED CONTENT AND ACTIVITIES

Organize work in units such as range, salad, and pastry units.

Dovetail all operations when possible.

Plan a time schedule and job assignments which the worker can be expected to complete on time.

State specifically the amount of food to prepare, the exact recipe to be used, the size of servings, etc.

Refer to Topic 3, Improving Management Practices, for a Sample Daily Work Plan, also West and Wood, *Food Service in Institutions,* pp. 352-353.

Appreciating the value of doing things the easy way

Discuss work simplification briefly: a better way to do the job; the simplest way; the quickest way; the safest way.

Work simplification should not be considered in the sense of using bakery products, canned vegetables, prepared mixes but rather to provide more time and energy for preparing more wholesome and nutritious products.

List ways to simplify work such as the following:

Providing and using labor-saving equipment

Providing an adequate number of tools

Placing equipment in most effective location

Learning to make the best use of physical efforts

Simplifying movement of materials from one location

Weighing, measuring, counting

Reducing delays in work

Using the right tool for the job

Review and discuss, and, if time permits, demonstrate (or have participants demonstrate) a few of the time and work shortcuts listed on Activity Sheet 12.

Have participants develop a list of their own time and work shortcuts.

Preparing Food for Serving

Although menu planning and purchasing are of major concern, it is the end product—the lunch that is served—that can make or break a school lunch program. The goal of every food service should be the satisfactory service of well-prepared food.

The appearance of the food on the counter and on the plate influences its acceptability to the consumer and his enjoyment of it. Eye appeal is gained through contrasting and interesting combinations of foods differing in type, color, and form as well as arrangement on the plate. Properly prepared and attractively served meals are stimulating to the appetite.

It must be remembered, too, that the last plate served is as important as the first and should contain the same foods in the same quantities and be served just as attractively.

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
Gaining an appreciation of the value of a well-arranged counter	Using a typical school lunch menu, actually demonstrate setting up the counter for ease and speed of service. Ask class for suggestions. Point out the following facts: School food service differs from commercial food service in that the hot food is served first. All foods on the menu must be served to each child. The arrangement or order of food and supplies on the counter affects the speed of the line. Condiments, relishes, mustard, and ketchup placed on the counter slow up the line if each person serves himself. Only those pieces of silver and china needed for the meal should be put out for use. Equipment needed to serve the meal, such as tongs, solid and perforated spoons, spatulas, forks, ladles, scoops, and plastic gloves should be planned. (Note: All food should be served with some tool—not with the hands.) Plans should be made for the most convenient arrangement of the hot food sections. Placement of food should be planned in relation to the type of school—elementary or secondary. Plans should include a time to wipe off the front of the serving counter and tray slide, pick up articles such as straws, etc., between serving periods. The manager and servers should check the appearance and arrangement of the counter before the customers arrive.
Appreciating the importance of merchandising food	Making the counter and food attractive to the customers is an important aspect of food service. Counter decorations should be

planned for seasons, holidays, special school events, etc. Elementary children are especially appreciative of them. The best decorations are those made by the children themselves in conjunction with the art department. Other decorations may be made by the school lunch personnel or purchased. Baskets or trays of fresh fruit are attractive.

Include garnishes for food when menus are planned. Many garnishes and/or food accompaniments may be made using government donated foods. Have class make suggestions and list on chalkboard. Some suggestions follow:

Chopped hard-cooked dried egg on spinach

Peach slices on vanilla, chocolate, butterscotch, and tapioca puddings

Sweetened cooked red tart cherries and whole cranberries

Broiled peach half and pineapple slices

Pear half filled with colorful gelatin cubes

Pineapple ring and jellied cranberry star

Grated cheese, julienne cheese, cheese balls, cheese cubes

Grated cheese mixed with crumbs

Buttered and browned bread crumbs or cubes

Peas on creamed chicken in toast cups

Cheese cubes or straws in tossed salad

Grapefruit sections on lime gelatin

Colored apple slices

Whipped topping made with dried milk

Other garnishes should be listed which would be economical for school use. For example, the following might be used:

Parsley sprigs—chopped, diced

Spiced apple rings

Colored gelatin cubes

Flavored dry gelatins

Colored sugar and coconut

Toasted coconut

Paprika

Chocolate decorettes

Colored sprinkles

Chopped chives

Slices or wedges of lemon or orange

Hard-cooked egg slices

Carrot curls

Sprigs of celery or leaves

Pepper rings, radish roses

Tomato wedges or slices

Broken maraschino cherries

Fresh berries in season

Sliced bananas

The list of garnishes developed might be mimeographed for each class member.

Arrangement of foods on the counter contributes to its attractiveness.

Arrange choices of fruit desserts in rows of contrasting color.

If they are available, serve desserts in dishes which contrast with the food.

Use glass or clear plastic sherbet dishes or glass custard cups.

Arrange pie or cake wedges on the counter with points facing the customer.

Arrange complete Type A meal on tray and exhibit in conspicuous place for all to see.

Developing skill in serving techniques

Each person responsible for serving food needs thorough training in serving techniques. Some of the following areas which might be included:

Placement of plates, etc., in order to reduce distance reached

Use of both hands. Make every motion count.

Dipping once per serving for potatoes, gravy, vegetables, etc.

Ladling soup and gravies to avoid dripping on plate

Arrangement of the food on the plate. An experimental plate should be tried before serving time. Place foods on plate according to color, shape, and form contrasts.

Serving all foods within the rim of the dish. No food should hang or drip off.

Wiping off any dripped material from edges of dishes with clean counter cloth

DESIRED LEARNINGS	SUGGESTED CONTENT AND ACTIVITIES
	Keeping serving counter clean and orderly Notifying cooks before food is completely used up at the counter
Appreciating the value of portion control	Uniform size servings usually contribute to customer satisfaction. They are also important in determining amounts of food to prepare. A point which might be stressed is importance of portion control. Point out that recipes can be depended upon to give stated number of portions only if the servings are of a uniform size. Emphasize desirability of the following procedures: Preportioning food before cooking whenever possible Using standard-size pans for which number of servings has been established. Filling pans uniformly Cutting or marking off food into uniform servings wherever possible Using standard-size serving equipment (see Card A-4, PA-271, for standard sizes of serving utensils and cutting diagrams for correct portioning). Point out that standard-size counter serving spoons hold ½-cup portions when they are filled. Ask class to list foods to serve with a solid spoon and those to serve with a perforated spoon.
Determining ways to check number of portions obtained	Various devices can be used for checking portions obtained from a given product, including the following: A simple check sheet on which all items are listed. Permits check as each is served. Count of individual plates before serving. Count of number of servings (as preportioned before lunch is served). A counting machine. Press key each time an item is served, etc.
Determining foods which may be preportioned	Have participants make a list of foods that can be preportioned by the following methods: Slicing Counting Measuring Dish or container Cuts Weight Activity Sheet 13 is prepared for your use.

DESIRED LEARNINGS

Developing an understanding and appreciation of the importance of attitude, efficiency, and grooming of server

SUGGESTED CONTENT AND ACTIVITIES

Food that is served in a speedy, courteous, and cheerful manner by neatly dressed and well-groomed employees contributes much to the acceptability of the lunch program.

Discuss the effects of quick and efficient service such as the following:

There is more time to eat lunch.

The student is more likely to be a steady customer rather than an occasional one.

Other students and teachers will be influenced to buy their lunch.

A higher percent of participation should result.

Workers themselves should not be as tired at the end of serving time.

Point out the effect of a pleasant attitude and manner:

The customer enjoys the lunch and lunchroom atmosphere.

Little children adjust more readily to the new experience of eating at school.

Children are more willing to try new foods and to eat the lunch.

Remind the workers that their own attitudes and cheerfulness are improved by getting sufficient sleep, by eating good breakfasts, and by taking a "break" to refresh themselves physically and to freshen up before serving time.

The customer notices the appearance of the person serving. For this reason, she should be neatly dressed and well groomed. Discuss the dress and grooming of all employees. Stress the following:

Clean, becoming white uniforms and aprons—the latter to be removed at serving time

Comfortable, low-heeled shoes, which protect all parts of the feet, and clean hose

Hairnets which completely cover the hair; caps for men

Clean, short fingernails free from all polish

No jewelry worn on ears, uniform, arms, and hands with the exception of wedding rings; avoid fancy handkerchief hanging from pocket.

Lipstick and other makeup applied sparingly and carefully. A little lipstick and rouge help to perk up the appearance of anyone wearing white.

Student workers: hairnets and aprons for girls; caps, aprons, and/or white jackets for boys. Aprons worn over sweaters and jackets to protect clothes and keep points of sweaters and jackets out of food.

Bathing and using deodorant daily

Evaluation

1. Using the pop-up session method of review, have each participant give a point of information learned from the unit of work.
2. Give the participants practical tests in measuring and weighing ingredients.
3. Prepare and give an objective examination covering the unit of work.
4. Have participants actually prepare foods, using the various cookery principles described. Have participants score their own products.
5. Through observation of participants, note their understanding of use of standardized recipes.
6. Have participants plan a work schedule for their own situation, using a favorite menu.
7. Give each group of two or three participants a practical test in setting up the serving counter for specific menus.
8. Through observation, note the way participants merchandise their food, following the training session.
9. Observe the dress and appearance standards of workers following the training session.
10. Observe the participants' use and understanding of serving techniques.
11. Note the number of portions obtained from a given product now as compared to the past.

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——— Recipes—Type A school lunches. PA-271. 1958. $2.75

Wood, M. A. & Harris, K. W. Quantity recipes from meals for many. Ithaca, New York 14850. College of Home Economics at Cornell University, Ithaca, New York

Films and Filmstrips

Aluminum Cooking Utensil Company. New Kensington, Pa. Magic knife. 16 mm. Color. 20 mins.

American Institute of Baking. 400 E. Ontario St., Chicago, Ill. 60611. Modern sandwich methods, school lunchroom version. 35 mm. 33⅓ rpm turntable for record. Color. 24 mins.

College of Home Economics at Cornell University, Ithaca, New York 14850. Muffin making. 23 slides. 3¼″ x 4″. Black and white. Rental $1.25

New York State Education Department, School Lunch Supervision. Albany, New York 12224. Cooking fresh vegetables for the school lunch. Filmstrip or slides. 27 frames. 2 inches x 2 inches. Color

———Let's have more vitamin A and C foods in school lunches. Filmstrip or slides. 15 frames. 2 inches x 2 inches

———Nutrients in a Type A school lunch. 19 slides. 2 inches x 2 inches. Color

———Preparing a school lunch. 28 slides. 2 inches x 2 inches. Color

New York State Department of Health, Film Library. 84 Holland Ave., Albany, New York 12208. Food preparation. 16 mm. Color. 13 mins.

Syracuse University Film Library. Syracuse, N.Y. Salad preparation. 16 mm. Color. 14 mins.

U.S. Department of Interior, Fish and Wildlife Service. Washington, D.C. 20402. Food for thought. 16 mm. Color. 15 mins.

ACTIVITY SHEET 1
TOPIC 5

DEVELOPMENT AND USE OF SCORECARDS

List the general areas of a food product to be scored. Under each area list related and desirable characteristics of the product. Decide on value to be given each area and subdivisions. The total of the areas should equal 100 percent. Provide space in the right-hand margin to rate each area and to compute the total score. The total of all areas will indicate how close the product came to meeting the 100 percent standard. See following scorecards.

* * * * *

SCORECARD FOR MEAT LOAF

Standard Product	*100*	*Score*
Appearance	30	——
Slightly browned, soft crust		
Firm enough to be smoothly sliced but not "solid" in appearance		
Texture	35	——
Soft, slightly crumbly, not "solid"		
Moist enough to hold together well		
Tender, may be easily cut with fork		
Flavor	35	——
Characteristic of well-prepared meat plus seasoning for meat loaf		
Well-blended		
Total		——

ACTIVITY SHEET 2
TOPIC 5

SCORECARD FOR MIXED VEGETABLE OR FRUIT SALAD

Standard Product	*100*	*Score*
Arrangement Attractive, simple, pretty, appeals to taste and to the eye	15	——
Combination of flavors Using foods with flavors that combine well	15	——
Appearance Well-blended color contrast Clean, neat, no spattered drops of dressing, no excess dressing to make salad soupy Pieces cut large enough so that each food may be distinguished Lightly tossed salad, obviously not overmixed	40	——
Temperature and Texture Salads must be cold and ingredients should be as nearly like their original form as possible. No mushiness—crisp Identity of ingredients retained	30	——
Total		——

ACTIVITY SHEET 3
TOPIC 5

SCORECARD FOR BISCUITS

Standard Product		*100*	*Score*
External Characteristics		30	
Shape—cylindrical, uniform, free from bulges on sides or top	10		——
Crust—uniform browning, free from yellow or brown spots, fairly smooth, tender	10		——
Volume—almost twice the volume of the unbaked	10		——
Internal Characteristics		40	
Texture—medium fine, tender crumb	20		——
Grain—flaky, peeling off in thin strips with fine, even cells	10		——
Color—creamy white, free from brown or yellow spots	10		——
Flavor		30	
Blended flavor of well-baked ingredients, free from any undesirable flavor from fat, baking powder, or salt	30		——
Total			——

ACTIVITY SHEET 4
TOPIC 5

A GUIDE FOR USE BY INSTRUCTORS WHEN EVALUATING THE CONTRIBUTIONS OF A COMMERCIAL RECIPE

The revised nutritional requirements for the Type A lunch of 1958 included changes in protein and fruit and vegetable.

PROTEIN. Two ounce edible portion of protein as served remained unchanged. The protein foods allowed were lean meat, poultry, fish; or 2 ounces of cheese; or one egg; or ½ cup of cooked dry beans or peas; or 4 tablespoons of peanut butter; or an equivalent quantity of any combination of the above listed foods. To be counted in meeting this requirement, these foods must be served in a main dish or in a main dish and one other menu item. (This is exclusive of the protein in beverage, milk, bread, and butter.)

FRUIT AND VEGETABLE. A ¾-cup serving, consisting of *two or more vegetables or fruits or both,* must be served. Full-strength vegetable or fruit juice may be counted to meet *not more than ¼ cup of this requirement.*

Fruit and Vegetable Contribution. Determine the amount in either ½- or ¼-cup portions. To be credited, a portion must furnish at least ¼ cup of the requirement for fruits and vegetables. Refer to PA-270, *Food Buying Guide,* revised January 1964, to determine the number of ½-cup portions per unit of purchase. Multiply by the number of units in the recipe. The answer will be the number of ½-cup servings in the recipe. For example:

23 half-cup servings of peas times 2 cans = 46 half-cup servings

Fruit Juice Contribution. Full-strength vegetable or fruit juice may be counted to meet not more than ¼ cup of the ¾ cup fruit and/or vegetable requirement. To obtain full-strength juices reconstitute:

Fruit juice concentrates Tomato paste	1 part to 3 parts water
or	
Tomato puree Tomato sauce	1 part to 1 part water

Check the label when purchasing fruit juices. Many products on the market today are fruit *drinks.* Full-strength fruit and vegetable juices must be used when meeting the requirement of the Type A lunch.

Total the number of servings of all fruits, vegetables, and full-strength juices and convert to ¼-cup portions to obtain the allowable servings in the recipe.

Portion sizes suggested for commercial recipes are usually for adults. Adjust portion size to needs of school-age children. Divide the total protein and total fruit and vegetable in the recipe by the new yield figure. If the answers indicate less than 1 ounce of protein or less than ¼ cup of fruit and vegetable, the amount of these foods should be increased to meet requirements.

ACTIVITY SHEET 5
TOPIC 5

AN ILLUSTRATION TO DETERMINE THE AMOUNT OF PROTEIN-RICH FOOD PER SERVING IN A RECIPE

Quite often you will find a recipe in a magazine or cookbook that you may wish to serve at school. As you know, the Recipe Card File states the amount of protein-rich food per serving, making menu planning much easier for you.

Determine the amount of protein-rich food per serving from the following recipe.

DRIED BEEF RAREBIT

32 Servings

Amounts	Ingredients
1 lb.	Butter or fortified margarine
8 oz.	Flour
2 tbsp.	Dry mustard
2 tbsp.	Worcestershire sauce
¼ tsp.	Pepper
1 gal.	Milk
2¼ lb.	Grated cheese
1½ lb.	Dried beef, shredded

Method:

1. Melt butter or margarine. Add flour and seasonings.
2. Add milk slowly while stirring and cook until smooth and thickened.
3. Add cheese and stir until it is melted. Stir in dried beef.
4. Serve over toast or toast squares.

Compare the above recipe with D-59 from your card file. What other information is lacking from the above recipe?

ACTIVITY SHEET 6
TOPIC 5

AN ILLUSTRATION TO DETERMINE THE AMOUNT OF FRUIT AND VEGETABLE PER SERVING IN A RECIPE

From the following recipe calculate the number of ¼-cup servings of vegetable and fruit which will contribute toward meeting this requirement in the Type A lunch.

Perfection Salad — 100 Servings

Amounts	Ingredients
1 c.	Plain gelatin
1 qt.	Cold water
1 gal.	Hot water (boiling)
4¼ c.	Sugar
2 tbsp.	Salt
1 qt.	Vinegar
3 lb.	Cabbage, shredded
3 lb.	Celery, diced
2 qt.	Pineapple (crushed or diced)
2 c.	Green pepper, chopped

Method: Soak gelatin in cold water and then dissolve in hot water; add sugar and salt. Cool until slightly thickened and add remaining ingredients.

This recipe contributes ________ ¼ cup vegetable/fruit.

ACTIVITY SHEET 7
TOPIC 5

SUGGESTED PRETEST FOR UNDERSTANDING RECIPE TERMS AND ABBREVIATIONS

Underline the expression that defines the term.

1. Blend is: *a.* to whip; *b.* to stir; *c.* to beat; *d.* to mix thoroughly.
2. Diced is: *a.* to cut into strips; *b.* to chop; *c.* to combine; *d.* to cut into cubes.
3. Equivalent measure is: *a.* graduated measures; *b.* equal in value and can be interchanged; *c.* liquid measure; *d.* accurate measure.
4. Flour (all-purpose) is: *a.* for making cakes only; *b.* presifted flour; *c.* can be used to make all sorts of products from yeast breads to cake; *d.* for making yeast breads only.
5. Garnish is: *a.* decoration for food; *b.* a special seasoning; *c.* square shape; *d.* a special spoon for mixing.
6. Graduated measure is: *a.* glass measuring cups only; *b.* quart measuring utensils only; *c.* measuring utensils marked to indicate varying amounts; *d.* utensil for measuring liquids only.
7. "i.e." is an abbreviation for: *a.* French whip; *b.* "if desired"; *c.* to add slowly; *d.* "that is."
8. Internal temperature is: *a.* temperature of well-done meat; *b.* temperature in middle or thickest part of a mixture of food; *c.* temperature of beef only; *d.* temperature of preheated oven.
9. Level is: *a.* an exact or even measure; *b.* a heaping measure; *c.* used only in measuring flour; *d.* used only in measuring in cups.
10. Palatable is: *a.* too salty; *b.* undercooked; *c.* tasty; *d.* well beaten.
11. Parboiled is: *a.* to cook with potatoes; *b.* to overcook; *c.* to peel before cooking; *d.* to boil until partially cooked.
12. Portion is: *a.* a specified measure or serving; *b.* a circular motion in beating; *c.* a serving spoon; *d.* dish made from "mixes."
13. Portion control is: *a.* special size scoop; *b.* term applies only to serving ice cream; *c.* using correct size scoop, spoon, cup, etc. to insure uniform servings and number of servings as called for in recipe; *d.* a biscuit cutter.

14. Recipe is: *a.* paid invoice; *b.* directions for preparing a certain food or dish; *c.* directions needed *only* by inexperienced cooks; *d.* directions needed *only* for preparing a new dish.

15. Reconstitute is: *a.* to mix by hand; *b.* to beat with power mixer; *c.* to make again, restore to original state; *d.* a term applied to nonfat dry milk only.

16. Scoop is: *a.* a mixer attachment; *b.* a tool for portioning desserts only; *c.* a slotted spoon; *d.* a tool used for portioning such items as drop cookies, muffins, meat, or some vegetable.

17. Stir is: *a.* to sift food before mixing; *b.* to beat thoroughly; *c.* a folding motion; *d.* mixing food materials with a circular motion.

18. Undiluted is: *a.* mixed with dry ingredients; *b.* full strength—nothing added; *c.* milk only added; *d.* term used with orange juice only.

19. Variation is: *a.* mixing two foods together; *b.* term applied to adding cheese only; *c.* term applied to adding nuts only; *d.* changing the original product or recipe by adding another ingredient, or changing shape, etc.

20. Yield is: *a.* weighing before measuring; *b.* compressed yeast; *c.* producing or making a definite number of servings or portions of a specified size; *d.* cutting in squares.

Abbreviation for:

A. Tablespoon is: *a.* tls.; *b.* t; *c.* sp; *d.* tbsp.

B. Teaspoon is: *a.* tsp; *b.* T; *c.* tp; *d.* s.

C. Cup is: *a.* cp; *b.* #; *c.* no abbreviation; *d.* c.

D. Pint is: *a.* P; *b.* #; *c.* pt.; *d.* qt.

E. Quart is: *a.* pt.; *b.* qt.; *c.* q.; *d.* bu.

F. Ounce is: *a.* qt.; *b.* tsp.; *c.* gm.; *d.* oz.

G. Pound is: *a.* pk.; *b.* gm; *c.* lb.; *d.* kg.

H. Gallon is: *a.* gal.; *b.* 2c.; *c.* 1 qt.; *d.* bu.

ACTIVITY SHEET 8
TOPIC 5

INSTRUCTOR'S GUIDE FOR USE IN DISCUSSING INFORMATION INCLUDED IN A STANDARDIZED RECIPE

1. Appropriate title for recipe
2. Yield of the recipe—in number of servings and/or volume or weight of mixture
3. Size of such servings—in volume, weight, or size of piece
4. The amount of protein-rich food and/or fruit or vegetable which each serving provides. (This credit toward meeting the Type A lunch requirement is shown on all recipes in PA-271 which contribute at least 1 ounce of protein-rich food or its equivalent and/or ¼ cup fruit and vegetable. (For additional information see General Information Card A-1—Recipes, Type A School Lunches.)
5. Size of pan used, especially for baked or congealed items and, if pan size is of particular importance to the quality of the finished product or to the way in which the product is portioned or both. Example: Biscuits (Card B-1) no pan size is given. However, for a recipe such as "Jellied Cottage Cheese and Vegetable Salad" (Card E-9) the number of pans to use, as well as size of pans, is given because this information is essential to obtaining the size piece specified.
6. Ingredients listed in the order used
7. Type or form of ingredients to use is clearly specified, such as all-purpose flour, melted fat, chopped onions, etc.
8. Quantity of each ingredient given in both weight and volume
9. Clear, precise instructions for the method of preparing and combining the ingredients
10. Clear, precise instructions for cooking method, time, and temperature
11. Clear, precise instructions for size of portion and for method of service if the item prepared requires this additional information
12. Specific instruction on how to vary the recipe by substituting one ingredient for another, when such adaptations are desirable

ACTIVITY SHEET 9
TOPIC 5

INSTRUCTOR'S GUIDE FOR USE IN DEMONSTRATING RECIPE ADJUSTMENT IN RELATION TO PORTIONS NEEDED

Cheese Potato Casserole D-20

Ingredients	100 Portions		For 250 Portions
	Weight or Measure	× Factor	= Weight or Measure
Diced cooked potatoes	25 lb.	× 2.5	= 62½ lb.
Butter or margarine	12 oz.	× 2.5	= 30 oz. (or 1 lb. 14 oz.)
Flour	12 oz.	× 2.5	= 1 lb. 14 oz.
Salt	½ c.	× 2.5	= 1¼ cups
Milk	2 gal.	× 2.5	= 5 gal.
Grated cheese	6 lb. 4 oz.[1]	× 2.5	= 15 lb. 10 oz. (or round to 16 lb.)
Dry bread crumbs	8 oz.[2]	× 2.5	= 1 lb. 4 oz.
Melted butter or margarine	2 oz.	× 2.5	= 5 oz. (¼ c. 2 tbsp.)

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[1] Convert to ounces before multiplying, as indicated on General Information Card A-2.

[2] For additional information on table of weights and their approximate equivalent in measure, see the following:

Food for Fifty, 4th edition, S. F. Fowler and B. B. West. Wiley. 1961. pp. 11-22

Handbook for Food Preparation. Publication by the American Home Economics Association, 1600 20th St., N.W., Washington, D.C. 20009. 1963

PA-270—*Food Buying Guide for Type A School Lunches*. Superintendent of Documents, Govt. Ptg. Off., Washington, D.C. 20402. Revised 1964

School Lunch, Marion Cronan, Charles A. Bennett Co., Peoria, Ill. 1962. pp. 325-329

ACTIVITY SHEET 10
TOPIC 5

WORKSHEET FOR DETERMINING "AS PURCHASED" (A. P.) AMOUNTS NEEDED FOR A GIVEN RECIPE USING THE BUYING GUIDE

Recipe	Cooked Food	Amount ÷	A. P. FACTOR = Amount Needed
Cheese-potato casserole (D-20)	Potatoes	25 lb.	.81 = 30.86 or 31 lb.
Barbecued hash (D-14)	Chopped pork	12 lb., 8 oz.	(Use roast, shoulder butt, bone in) =
	Chopped beef	12 lb., 8 oz.	(Use roast, boneless) =
	Chopped veal	12 lb., 8 oz.	(Use stew meat) =
	Potatoes	13 lb.	=
Codfish cakes (D-25)	Mashed potatoes	16 lb.	=
Creamed turkey (D-28)	Turkey	12 lb., 8 oz.	(Use ready-to-cook) =
Ham-bean scallop (D-32)	Ham	3⅜ lb. or 3 lb., 6 oz.	(Use shoulder picnic, bone in) =

ACTIVITY SHEET 11
TOPIC 5

WORKSHEET FOR USE IN DETERMINING QUANTITIES OF FOOD TO PREPARE FOR A GIVEN NUMBER OF TYPE A LUNCHES

Food	Size of Serving	Number of Lunches To Be Served		Number Servings Per Purchase Unit		Quantity To Prepare*
Protein-rich foods						
Beans, dry	½c.	360	÷	11	=	32.72 or 33 lbs.
Turkey, ready-to-cook	2 oz.	300	÷		=	lb.
Ham, baked sliced	2 oz.	150	÷		=	lb.
Peanut butter	2 tbsp.	255	÷		=	No. 10 can
Cheese	2 oz.	90	÷		=	lb.
Fruits and vegetables						
Apricots, dried	½c.	170	÷		=	lb.
Applesauce (fresh apple)	½c.	125	÷		=	No. 10 can
Cherries, canned	¼ c.	190	÷		=	No. 10 can
Green beans, canned	½c.	260	÷		=	No. 10 can
Lettuce	¼ c.	140	÷		=	lb.
Potatoes	½c. cooked	136	÷		=	lb.
Cabbage, raw shredded	½c.	110	÷		=	lb.
Cabbage, cooked	½c.	110	÷		=	lb.
Butter or f. margarine						
Butter	2 tsp.	125	÷		=	lb.
Margarine	2 tsp.	180	÷		=	lb.

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* To determine quantity to prepare: Number of lunches to be served divided by the number of servings per purchase unit (Food Buying Guide, revised January 1964), will give the as purchased quantity to prepare

ACTIVITY SHEET 12
TOPIC 5

EXAMPLES OF TIME AND WORK SHORTCUTS

1. Vegetable preparation:
   - a. Do not cut anything in the hand that can be cut on a board or table.
   - b. Large cutting boards and French knives save time in chopping foods.
   - c. For hand cutting of vegetables and fruits, line up a handful of celery, etc., on a board and cut through all at once instead of one at a time.
   - d. Use kitchen shears to cut vegetables for salads and radishes tops. Snip tails, then hold radishes over washing pan and cut radishes from tops.
   - e. Use slicer attachment on mixer for raw potatoes, carrots, etc.
   - f. Use grater attachment on mixer for grating carrots or cabbage.
   - g. Add dry milk powder to potatoes that are to be mashed instead of reconstituting milk first.
   - h. Rub hands with fat before preparing squash or other fuzzy vegetables to prevent roughness and irritation of hands.
2. Fruit preparation:
   - a. Dampen raisins with water. They will go through the food chopper without making it sticky.
   - b. Oranges peel more easily if hot water is poured over them first.
3. Baked products:
   - a. Use dry mixes, for puddings, cakes, biscuits, etc., prepared in advance.
   - b. Weigh instead of measure.
   - c. Measure all dry ingredients first, then fats and liquids, to avoid pan washing.
   - d. Use correct tools to save time—measure in largest size such as 1 quart, not 4 cups; 1 tablespoon rather than 3 teaspoons.
   - e. For variety, roll biscuit dough in triangular or square shape, then cut in smaller squares, diamonds, etc., to save reworking and rolling dough and handling biscuits.
   - f. Scoop muffin mixture into tins, pour from bent No. 10 can, or bake in sheets.
   - g. Drop biscuits and drop cookies are time savers. Cooky dough that is rolled by hand and chopped with baker's scraper is fast.
   - h. Use quick roll recipe that can be rolled directly from mixing.
   - i. In making hamburger rolls, first roll one layer of dough very thin. Brush lightly with butter (margarine). Fold over thinly rolled layer on top and cut both layers at once.
   - j. To measure honey or other sticky substance, grease measuring cup first.
   - k. Use rubber plate scraper to clean batter out of bowls, etc.
   - l. Cut cake before frosting.
   - m. Use two hands, instead of one, wherever possible, e.g., cutting with two cutters, picking up with both hands, etc.

4. Miscellaneous foods:
    a. Instead of breading each slice of fish individually, place several pieces of fish in a pan, with the bread crumbs, and shake pan.
    b. Grind such foods as onions, meats, and cheese for sandwiches. Saves time and gives uniform results.
    c. For easier peeling, cool eggs immediately in cold water after hardcooking.
    d. Cut four fingers of cheese at once.
    e. Use a whip beater to smooth gravies and sauces.
    f. To break up nut meats quickly, put in paper bag and roll with rolling pin.

5. Other:
    a. Put washed silverware (handles up) in No. 10 cans which have holes punched in bottom. After silverware is rinsed and sanitized, let dry in can.
    b. Have plastic bag for mixer when using shredders or dicers—saves in cleaning work area.

6. Other management hints:
    a. Know measurement of pans, scoops, and ladles.
    b. Avoid carrying items from one place to another—use dollies or trays.
    c. Keep work areas orderly and clean.
    d. Learn to watch and study your movements. Cut down on the number of movements necessary in operation. Try to shorten distance hands travel. Keep body in balance to lessen fatigue. Always work with both hands.
    e. Keep equipment in good condition.
    f. Maintain good lighting, comfortable working temperature, order, cleanliness, etc.
    g. Remain open-minded to new ideas.

ACTIVITY SHEET 13
TOPIC 5

INSTRUCTOR'S GUIDE FOR USE IN DISCUSSING FOODS WHICH MAY BE PREPORTIONED BY VARIOUS METHODS

Slicing

Counting

Measuring
(using ladles, scoops, serving spoons, measures)

Dish or container

Cut or Mark Off

Weight

Meat, cheese, meat loaf, tomatoes, apple rings

Pineapple slices, chicken parts, tarts, cupcakes, dumplings, rolls, peach and pear halves, potatoes; jams, jellies, relishes, dressings, desserts, and gelatin salads in paper cups; cherries as a dessert, cherries for garnish; frankfurters

Vegetables, gravies, sauces, ice cream, potato and fruit salads, soups, meat patties

Milk, custards, ice cream in individual serving dishes

Pie, cake, gelatin salads, meat pies, cabbage and lettuce wedges

Hamburgers, sliced meats and cheese, vegetables, batter or dough per pan

Section III

Effective Use of a Variety of Methods and Resources In Training Adults

SECTION III

Effective Use of a Variety Of Methods and Resources In Training Adults

Many methods may be used in teaching school lunch personnel. Each session and each topic must meet a specific need which the teacher and the learners have identified and on which they are in agreement. Since the majority of school lunch workers are adults, the approach will be somewhat different from the methods used to teach children and adolescents.

An understanding of ways adults learn best will help in planning and obtaining the greatest benefits from training. Experience in the activities of everyday living provides a background for problem solving which younger persons lack. Most adults have learned to assume responsibilities and are accustomed to being held accountable for their actions and decisions. They must have a reason for wanting to learn and an understanding of how the information acquired will be applied in actual work situations.

Methods of teaching and resource materials should be selected for the particular purpose they are expected to accomplish. The instructor needs to be thoroughly familiar with subject matter and illustrative aids in advance of presentation to the class. If mechanical equipment such as projectors or record players is to be used, check methods of operating, electrical connections, and conditions of the component parts before the class begins. Available display and exhibit materials should be directly related to the subject.

Some suggestions for teaching adults and effective methods and resources are described in the section that follows.

GUIDELINES FOR TEACHING ADULTS

As a new experience gets under way, teacher and pupils plan together to determine how they will organize and carry out the classes. Usually the teacher leads such planning discussions. Information from studies which have been made of adult attitudes and learning processes are discussed here in detail.

Characteristics and Attitudes of Adult Learners

The adult has certain characteristics and attitudes gained from lifetime experiences that influence the approach, content, and methods used in teaching. Among these are the following:

Tendency to cling to preconceived ideas acquired through contacts with life situations, formal education, television, radio, newspapers, and other influences

Desire to find direct ways to solve immediate problems

Need for outlets for self-expression which give personal satisfactions

Wish to obtain status and recognition from other adults in the community

Sensitivity to embarrassing criticism and tendency to be discouraged easily.

Inclination to resist change and need for feelings of confidence and security before taking action

Family responsibilities and problems which may cause physical and mental fatigue

Necessity for establishing new learning patterns because of long period which has elapsed since school days

Lack of confidence in a younger leader who has had formal education but limited experience

Some Ways in Which Adults Learn

Teacher and pupils should be in agreement on needs and the ways planned to meet them. Good physical facilities and a friendly atmosphere help to put members of the group at ease.

Learning is more rapid when the learner has opportunities to participate. Examples: small discussion groups in which each person talks about the topic; demonstrations given by class members; giving each person the opportunity to operate, take apart, clean, and reassemble new equipment items.

Interest will be greater and more learning will be retained when a visible and tangible product appears. Examples: viewing of slides, films, and other visual aids; observing demonstrations and products produced; providing illustrated pamphlets and books; tasting foods discussed.

Group learning is usually more effective than individual learning. Examples: working in teams in quantity food preparation; assigning projects to committees; planning small group discussions.

The greater the number of sensory channels used, the greater is the learning process. Examples: using slides, films, closed circuit TV; playing back tape recording made by group; planning demonstrations and group discussions led by class member; setting up tasting panels to judge products.

Learning must be used to be retained. Examples: pupil demonstrations of procedures learned; planning ways to apply learnings to individual jobs or reviewing ways learnings have been used; assigning class member to show student workers a procedure which has been learned.

Learning is more permanent when new ideas and facts can be associated with familiar ones. Examples: The principle of steam kettle operation is similar to that of cooking in a double boiler; menu planners are less apt to omit Vitamin C in menus when they have seen cases of Vitamin C deficiency; a demonstration of gluten development in flour will emphasize the importance of thorough mixing of bread.

The desire to learn is essential to effective learning. Examples: Pictures of attractive products appeal to the individual's desire to achieve an equally fine product; students will work hard to turn out a good product which pleases a supervisor or teacher who shows appreciation for good performance; the policy of rewarding good performance by job promotions encourages interest in learning to improve on the job.

The instructor may also wish to refer to Teaching Briefs for Those Who Learn at the end of this section.

SELECTING METHODS AND RESOURCE MATERIALS

The way in which materials to be learned are presented is dependent upon the speed of learning of members of the class, as well as the extent of their past experiences with similar materials. For example, operating a food mixer is very similar to using the mixer commonly found in the home, while steam equipment utilizes a principle and requires mechanical manipulations which are different from any equipment to which the average homemaker is accustomed. It is important that the teacher be experienced in a wide variety of presentation methods, for many methods or techniques are not suitable for all types of teaching and, in some instances the same material must be presented in more than one way to be sure that the desired learning has taken place. Physical setup of the classroom and amount of time available further influence methods and resources chosen.

In dealing with students who are unknown to each other, learning activities which put individuals at ease and help them to get acquainted will be selected to prepare them for participation in group discussions. Other types of methods and resources may be used after a feeling for team accomplishment is achieved.

Characteristics of Appropriate Methods and Resources

Methods and resources need to be the best available to meet needs of the group and to make learning most effective in the shortest possible time. A positive approach to a subject is always superior to a negative presentation. Establishing attainable standards consistent with the individual and the job stimulate interest and the desire to learn. Throughout class sessions, methods used should be directed toward the development of resourcefulness and ability to make discriminating judgments. It is wise to plan activities which lead to development of skills and a feeling of security on the job.

Teaching Methods

Some teaching methods and resources and ways in which they may be used effectively are described in the following chart.

METHOD	APPLICATION AND USE
Brainstorming	A group of 6 to 12 persons pool ideas to reach best solution with understanding that no suggestion will be labeled "It can't be done."
Buzz session	Groups of 12-15 members of a larger group discuss issue. Leader can assign subproblem to each group or same problem to all groups.
Committee work	An assignment of a selected group is planned to study specific problem and to propose a solution for consideration of leader and entire group.
Demonstrations	This method is used for teaching skills, developing understandings, and introducing new and improved practices. Live or filmed professional demonstrations or those given by selected members of the group, who have special abilities, may be equally effective. Thorough planning of points to be brought out and equipment and supplies to be used, positioning in clear view of the audience, skill and linguistic ability of the demonstrator, plans made for putting skills into practice—all contribute to the value of the demonstration.
Discussions	Introduce consideration of a common problem or new procedure. Explore ideas advanced in small groups. Evaluate formal stage presentation or films. Present viewpoints of many persons and bring common understandings if leader encourages all to participate. Use films or recordings representing concerns of group as discussion starters. Encourage each individual to offer ideas and filter out the most significant for presentation to large group.
Field trip	Provide new information and knowledge of a similar or related facility through observation of activities that cannot be brought into the classroom. Usefulness in training depends upon preplanning with persons to be visited, as well as the visiting group, to be sure that purposes of the trip are understood and will be accomplished. Immediate discussion of observations and evaluation in terms of how objectives were met and the new learnings gained will increase effectiveness.

METHOD	APPLICATION AND USE
Forum	Present various sides of controversial question by two or more speakers with opposing viewpoints. Follow up is similar to symposium, with questions directed to specific speakers.
Panel	Representative group of four-six members discusses question before audience with leadership of moderator. After formal presentation, discussion is opened to audience or small groups formed to consider problem.
Phillips-66	Groups of six are given 6 minutes to select a chairman and recorder and arrive at recommendation for the best solution to a problem.
Role playing or Sociodrama	Members of group who assume roles to portray common human relations problems spontaneously act out situations. Success depends upon resourcefulness of leader, use of a problem that is real to the group members, choice of cast members, and ending the scene when action is sufficient to provide basis for discussion. Performance, followed by group discussion, is directed by a leader who is able to prevent embarrassing any members of group. Focus of discussion is upon facts and principles rather than ability of actors.
Symposium	Introduce wide variety of experience and knowledge through talks by two or more persons on different phases of same topic. Use large-group discussion or question and answer follow-up with symposium speakers and audience participation.

Resources

Resources and suggestions for their effective use are described in the following chart.

METHOD	APPLICATION AND USE
Books, pamphlets, periodicals	Help class members enlarge knowledge of topic and see different viewpoints as expressed by authorities on topic. Use source of up-to-date information for discussions, panels, committee work, skill improvement, etc. Provide opportunities for independent study by individuals who wish to advance beyond regular training classes.

RESOURCE	APPLICATION AND USE
Exhibits, displays, posters	These resources are effective in bringing about improved practices if properly planned. The emphasis should be placed on a single thought which is easily understood. Correct lighting, placement in easy view, large pictures, and lettering which tells the story quickly are factors contributing to successful use.
Films, filmstrips, slides	Make available real-life illustrations of new concepts and procedures not otherwise accessible to group. Leader should preview material to be sure that mechanical equipment is in working order, and arrange for proper lighting and ventilation.
Flannelboards	Major concepts may be presented or summarized material covered. Opportunity is offered to build up presentations as speaker talks, attracting and holding interest of audience.
Overhead projector	Presents ideas, attitudes, and facts concisely and emphasizes ideas communicated by the teacher. Materials prepared may be used again, as they apply to different topics. Step-by-step learning is possible through use of overlays.

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TEACHING BRIEFS FOR THOSE WHO LEARN

Continuous learning on the part of school lunch personnel is necessary if goals are to be reached. Learning experiences are available daily that will lead to new knowledge and improved attitudes and skills. Making the most of opportunities to learn will increase the satisfactions which come from a job well done. Many persons are responsible for teaching others. The following facts about learning will be helpful both in teaching and in learning.

Facts about Learning	What These Mean to You
Learning comes through observation of others.	Do each job well to serve as a good example. Be alert to observe and adopt good practices of others.
Several observations, followed by frequent practice, may be needed to develop skills.	Show learner several times how the job is done and let the individual do it, with supervision, before doing it independently.
Learning leads to change, which people like but often fear to accept.	Be willing to explore and accept new ideas. Explain reasons for change so that each person understands why he is asked to change.
Understanding goals to be achieved leads to greater learning.	Make all individuals aware of the helps which the lunch program can give to children and to furthering their education.
Learners need opportunity to evaluate their own ideas in terms of desirable outcomes.	Give workers an opportunity to try out their own ideas and help with evaluation. Encourage suggestions for better ways to do the job. Solicit questions from the learner.
Cooperative planning for what is to be done increases understanding and cooperation of each member of team.	Include helpers in planning sessions. Emphasize importance of teamwork to accomplish the job.
Written instructions clarify facts to be learned and are a ready reference to be sure that the learning is right.	Put instructions in writing whenever possible. Post in work area written instructions for jobs that are repeated frequently.
An idea is more easily learned when it is broken into small units with emphasis on one portion of the total.	Teach only one step of a job at a time. When planning posters or school lunch stories, do not try to introduce more than one idea in each.
Recognition of a job well done encourages improved learning.	Praise good performance at every opportunity. Use good work as a basis for promotion.

IF THE LEARNER HASN'T LEARNED, THE TEACHER HASN'T TAUGHT.